

Symbol	Typ	Titel
F	Sektion	MECHANICAL ENGINEERING; LIGHTING; HEATING; WEAPONS; BLASTING
F16	Klasse	ENGINEERING ELEMENTS OR UNITS; GENERAL MEASURES FOR PRODUCING AND MAINTAINING EFFECTIVE FUNCTIONING OF MACHINES OR INSTALLATIONS ; THERMAL INSULATION IN GENERAL
F16H	Unterklasse	GEARING
		<u>Toothed gearings for conveying rotary motion</u>
F16H 1/00	Hauptgruppe	Toothed gearings for conveying rotary motion (specific for conveying rotary motion with variable gear ratio or for reversing rotary motion F16H 3/00) [1, 2006.01]
F16H 1/02	1-Punkt Untergruppe	. without gears having orbital motion [1, 2006.01]
F16H 1/04	2-Punkt Untergruppe	. . involving only two intermeshing members [1, 2006.01]
F16H 1/06	3-Punkt Untergruppe	. . . with parallel axes [1, 2006.01]
F16H 1/08	4-Punkt Untergruppe	 the members having helical, herring-bone, or like teeth [1, 2006.01]
F16H 1/10	4-Punkt Untergruppe	 one of the members being internally toothed [1, 2006.01]
F16H 1/12	3-Punkt Untergruppe	. . . with non-parallel axes [1, 2006.01]
F16H 1/14	4-Punkt Untergruppe	 comprising conical gears only [1, 2006.01]
F16H 1/16	4-Punkt Untergruppe	 comprising worm and worm-wheel [1, 2006.01]
F16H 1/18	4-Punkt Untergruppe	 the members having helical, herring-bone, or like teeth (F16H 1/14 takes precedence) [1, 2006.01]
F16H 1/20	2-Punkt Untergruppe	. . involving more than two intermeshing members [1, 2006.01]
F16H 1/22	3-Punkt Untergruppe	. . . with a plurality of driving or driven shafts; with arrangements for dividing torque between two or more intermediate shafts [1, 2006.01]
F16H 1/24	2-Punkt Untergruppe	. . involving gears essentially having intermeshing elements other than involute or cycloidal teeth (F16H 1/16 takes precedence) [1, 2006.01]
F16H 1/26	2-Punkt Untergruppe	. . Special means compensating for misalignment of axes [1, 2006.01]
F16H 1/28	1-Punkt Untergruppe	. with gears having orbital motion [1, 2006.01]
F16H 1/30	2-Punkt Untergruppe	. . in which an orbital gear has an axis crossing the main axis of the gearing and has helical teeth or is a worm [1, 2006.01]
F16H 1/32	2-Punkt Untergruppe	. . in which the central axis of the gearing lies inside the periphery of an orbital gear [1, 2006.01]
F16H 1/34	2-Punkt Untergruppe	. . involving gears essentially having intermeshing elements other than involute or cycloidal teeth (in worm gearing F16H 1/30) [1, 2006.01]
F16H 1/36	2-Punkt Untergruppe	. . with two central gears coupled by intermeshing orbital gears [1, 2006.01]
F16H 1/46	2-Punkt Untergruppe	. . Systems consisting of a plurality of gear trains, each with orbital gears [1, 2006.01]
F16H 1/48	2-Punkt Untergruppe	. . Special means compensating for misalignment of axes [1, 2006.01]
F16H 3/00	Hauptgruppe	Toothed gearings for conveying rotary motion with variable gear ratio or for reversing rotary motion (speed-changing or reversing mechanisms F16H 59/00-F16H 63/00) [1, 2006.01]
F16H 3/02	1-Punkt Untergruppe	. without gears having orbital motion [1, 2006.01]
F16H 3/04	2-Punkt Untergruppe	. . with internally-toothed gears [1, 2006.01]

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F16H 3/06	2-Punkt Untergruppe	. . with worm and worm-wheel or gears essentially having helical or herring-bone teeth [1, 2006.01]
F16H 3/08	2-Punkt Untergruppe	. . exclusively or essentially with continuously- meshing gears, that can be disengaged from their shafts [1, 2006.01]
F16H 3/083	3-Punkt Untergruppe	. . . with radially acting and axially controlled clutching members, e.g. sliding keys [5, 2006.01]
F16H 3/085	3-Punkt Untergruppe	. . . with more than one output shaft [5, 2006.01]
F16H 3/087	3-Punkt Untergruppe	. . . characterised by the disposition of the gears (F16H 3/083, F16H 3/085 take precedence) [5, 2006.01]
F16H 3/089	4-Punkt Untergruppe	 all of the meshing gears being supported by a pair of parallel shafts, one being the input shaft and the other the output shaft, there being no countershaft involved [5, 2006.01]
F16H 3/091	4-Punkt Untergruppe	 including a single countershaft [5, 2006.01]
F16H 3/093	4-Punkt Untergruppe	 with two or more countershafts [5, 2006.01]
F16H 3/095	5-Punkt Untergruppe	 with means for ensuring an even distribution of torque between the countershafts [5, 2006.01]
F16H 3/097	5-Punkt Untergruppe	 the input and output shafts being aligned on the same axis [5, 2006.01]
F16H 3/10	3-Punkt Untergruppe	. . . with one or more one-way clutches as an essential feature [1, 2006.01]
F16H 3/12	3-Punkt Untergruppe	. . . with means for synchronisation not incorporated in the clutches (synchronised clutches F16D 23/02) [1, 2006.01]
F16H 3/14	3-Punkt Untergruppe	. . . Gearings for reversal only [1, 2006.01]
F16H 3/16	2-Punkt Untergruppe	. . essentially with both gears that can be put out of gear and continuously-meshing gears that can be disengaged from their shafts [1, 2006.01]
F16H 3/18	3-Punkt Untergruppe	. . . Gearings for reversal only [1, 2006.01]
F16H 3/20	2-Punkt Untergruppe	. . exclusively or essentially using gears that can be moved out of gear [1, 2006.01]
F16H 3/22	3-Punkt Untergruppe	. . . with gears shiftable only axially [1, 2006.01]
F16H 3/24	4-Punkt Untergruppe	 with driving and driven shafts coaxial [1, 2006.01]
F16H 3/26	5-Punkt Untergruppe	 and two or more additional shafts [1, 2006.01]
F16H 3/28	6-Punkt Untergruppe	 an additional shaft being coaxial with the main shafts [1, 2006.01]
F16H 3/30	4-Punkt Untergruppe	 with driving and driven shafts not coaxial [1, 2006.01]
F16H 3/32	5-Punkt Untergruppe	 and an additional shaft [1, 2006.01]
F16H 3/34	3-Punkt Untergruppe	. . . with gears shiftable otherwise than only axially [1, 2006.01]
F16H 3/36	3-Punkt Untergruppe	. . . with a single gear meshable with any of a set of coaxial gears of different diameters [1, 2006.01]
F16H 3/38	3-Punkt Untergruppe	. . . with synchro-meshing [1, 2006.01]
F16H 3/40	3-Punkt Untergruppe	. . . Gearings for reversal only [1, 2006.01]
F16H 3/42	2-Punkt Untergruppe	. . with gears having teeth formed or arranged for obtaining multiple gear ratios, e.g. nearly infinitely variable [1, 2006.01]
F16H 3/44	1-Punkt Untergruppe	. using gears having orbital motion [1, 2006.01]
F16H 3/46	2-Punkt Untergruppe	. . Gearings having only two central gears, connected by orbital gears (F16H 3/68-F16H 3/78 take precedence) [1, 2006.01]

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F16H 3/48	3-Punkt Untergruppe	. . . with single orbital gears or pairs of rigidly-connected orbital gears [1, 2006.01]
F16H 3/50	4-Punkt Untergruppe	 comprising orbital conical gears [1, 2006.01]
F16H 3/52	4-Punkt Untergruppe	 comprising orbital spur gears [1, 2006.01]
F16H 3/54	5-Punkt Untergruppe	 one of the central gears being internally toothed and the other externally toothed [1, 2006.01]
F16H 3/56	5-Punkt Untergruppe	 both central gears being sun gears [1, 2006.01]
F16H 3/58	3-Punkt Untergruppe	. . . with sets of orbital gears, each consisting of two or more intermeshing orbital gears [1, 2006.01]
F16H 3/60	3-Punkt Untergruppe	. . . Gearings for reversal only [1, 2006.01]
F16H 3/62	2-Punkt Untergruppe	. . Gearings having three or more central gears (F16H 3/68-F16H 3/78 take precedence) [1, 2006.01]
F16H 3/64	3-Punkt Untergruppe	. . . composed of a number of gear trains, the drive always passing through all the trains, each train having not more than one connection for driving another train [1, 2006.01]
F16H 3/66	3-Punkt Untergruppe	. . . composed of a number of gear trains without drive passing from one train to another [1, 2006.01]
F16H 3/68	2-Punkt Untergruppe	. . in which an orbital gear has an axis crossing the main axis of the gearing and has helical teeth or is a worm [1, 2006.01]
F16H 3/70	2-Punkt Untergruppe	. . in which the central axis of the gearing lies inside the periphery of an orbital gear [1, 2006.01]
F16H 3/72	2-Punkt Untergruppe	. . with a secondary drive, e.g. regulating motor, in order to vary speed continuously [1, 2006.01]
F16H 3/74	2-Punkt Untergruppe	. . Complexes, not using actuatable speed-changing or regulating members, e.g. with gear ratio determined by free play of frictional or other forces [1, 2006.01]
F16H 3/76	2-Punkt Untergruppe	. . with an orbital gear having teeth formed or arranged for obtaining multiple gear ratios, e.g. nearly infinitely variable [1, 2006.01]
F16H 3/78	2-Punkt Untergruppe	. . Special adaptation of synchronisation mechanisms to these gearings [1, 2006.01]
F16H 7/00	Hauptgruppe	<u>Gearing for conveying rotary motion by endless flexible members</u> Gearings for conveying rotary motion by endless flexible members (specific for conveying rotary motion with variable gear ratio or for reversing rotary motion F16H 9/00; endless flexible members <u>per se</u>, e.g. belts or chains F16G) [1, 2006.01]
F16H 7/02	1-Punkt Untergruppe	. with belts; with V-belts [1, 2006.01]
F16H 7/04	1-Punkt Untergruppe	. with ropes [1, 2006.01]
F16H 7/06	1-Punkt Untergruppe	. with chains [1, 2006.01]
F16H 7/08	1-Punkt Untergruppe	. Means for varying tension of belts, ropes, or chains (pulleys of adjustable construction F16H 55/52) [1, 2006.01]
F16H 7/10	2-Punkt Untergruppe	. . by adjusting the axis of a pulley [1, 2006.01]
F16H 7/12	3-Punkt Untergruppe	. . . of an idle pulley [1, 2006.01]
F16H 7/14	3-Punkt Untergruppe	. . . of a driving or driven pulley [1, 2006.01]
F16H 7/16	4-Punkt Untergruppe	 without adjusting the driving or driven shaft [1, 2006.01]
F16H 7/18	1-Punkt Untergruppe	. Means for guiding or supporting belts, ropes, or chains (construction of pulleys F16H 55/36) [1, 2006.01]
F16H 7/20	2-Punkt Untergruppe	. . Mountings for rollers or pulleys [1, 2006.01]
F16H 7/22	1-Punkt Untergruppe	. Belt, rope, or chain shifters [1, 2006.01]

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F16H 7/24	1-Punkt Untergruppe	. Equipment for mounting belts, ropes, or chains [1, 2006.01]
F16H 9/00	Hauptgruppe	Gearings for conveying rotary motion with variable gear ratio, or for reversing rotary motion, by endless flexible members (control of change-speed or reversing-gearings conveying rotary motion F16H 59/00-F16H 63/00; endless flexible members <u>per se</u>, e.g. belts or chains F16G) [1, 2006.01]
F16H 9/02	1-Punkt Untergruppe	. without members having orbital motion [1, 2006.01]
F16H 9/04	2-Punkt Untergruppe	. . using belts, V-belts, or ropes (with toothed belts F16H 9/24; pulleys of adjustable construction F16H 55/52) [1, 2006.01]
F16H 9/06	3-Punkt Untergruppe	. . . engaging a stepped pulley [1, 2006.01]
F16H 9/08	3-Punkt Untergruppe	. . . engaging a conical drum (F16H 9/12 takes precedence) [1, 2006.01]
F16H 9/10	3-Punkt Untergruppe	. . . engaging a pulley provided with radially-actuatable elements carrying the belt [1, 2006.01]
F16H 9/12	3-Punkt Untergruppe	. . . engaging a pulley built-up out of relatively axially-adjustable parts in which the belt engages the opposite flanges of the pulley directly without interposed belt-supporting members [1, 2006.01]
F16H 9/14	4-Punkt Untergruppe	 using only one pulley built-up out of adjustable conical parts [1, 2006.01]
F16H 9/16	4-Punkt Untergruppe	 using two pulleys, both built-up out of adjustable conical parts [1, 2006.01]
F16H 9/18	5-Punkt Untergruppe	 only one flange of each pulley being adjustable [1, 2006.01]
F16H 9/20	5-Punkt Untergruppe	 both flanges of the pulleys being adjustable [1, 2006.01]
F16H 9/22	3-Punkt Untergruppe	. . . specially adapted for ropes [1, 2006.01]
F16H 9/24	2-Punkt Untergruppe	. . using chains, toothed belts, belts in the form of links; Chains or belts specially adapted to such gearing (toothed belts F16G 1/28; V-belts in the form of links F16G 5/18; toothed V-belts F16G 5/20) [1, 2006.01]
F16H 9/26	1-Punkt Untergruppe	. with members having orbital motion [1, 2006.01]
F16H 13/00	Hauptgruppe	<u>Other friction gearing for conveying rotary motion</u> Gearing for conveying rotary motion with constant gear ratio by friction between rotary members (specific for conveying rotary motion with variable gear ratio or for reversing rotary motion F16H 15/00) [1, 2006.01]
F16H 13/02	1-Punkt Untergruppe	. without members having orbital motion [1, 2006.01]
F16H 13/04	2-Punkt Untergruppe	. . with balls or with rollers acting in a similar manner [1, 2006.01]
F16H 13/06	1-Punkt Untergruppe	. with members having orbital motion [1, 2006.01]
F16H 13/08	2-Punkt Untergruppe	. . with balls or with rollers acting in a similar manner [1, 2006.01]
F16H 13/10	1-Punkt Untergruppe	. Means for influencing the pressure between the members [1, 2006.01]
F16H 13/12	2-Punkt Untergruppe	. . by magnetic forces [1, 2006.01]
F16H 13/14	2-Punkt Untergruppe	. . for automatically varying the pressure mechanically [1, 2006.01]
F16H 15/00	Hauptgruppe	Gearings for conveying rotary motion with variable gear ratio, or for reversing rotary motion, by friction between rotary members (control of change-speed or reversing-gearings conveying rotary motion F16H 59/00-F16H 63/00) [1, 2006.01]
F16H 15/01	1-Punkt Untergruppe	. characterised by the use of a magnetisable powder or liquid as friction medium between the rotary members [2, 2006.01]
F16H 15/02	1-Punkt Untergruppe	. without members having orbital motion [1, 2006.01]
F16H 15/04	2-Punkt Untergruppe	. . Gearings providing a continuous range of gear ratios [1, 2006.01]

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F16H 15/06	3-Punkt Untergruppe	. . . in which a member A of uniform effective diameter mounted on a shaft may co-operate with different parts of a member B [1, 2006.01]
F16H 15/08	4-Punkt Untergruppe	 in which the member B is a disc with a flat or approximately-flat friction surface [1, 2006.01]
F16H 15/10	5-Punkt Untergruppe	 in which the axes of the two members cross or intersect [1, 2006.01]
F16H 15/12	6-Punkt Untergruppe	 in which one or each member is duplicated, e.g. for obtaining better transmission, for lessening the reaction forces on the bearings [1, 2006.01]
F16H 15/14	5-Punkt Untergruppe	 in which the axes of the members are parallel or approximately parallel [1, 2006.01]
F16H 15/16	4-Punkt Untergruppe	 in which the member B has a conical friction surface [1, 2006.01]
F16H 15/18	5-Punkt Untergruppe	 externally [1, 2006.01]
F16H 15/20	6-Punkt Untergruppe	 co-operating with the outer rim of the member A, which is perpendicular or nearly perpendicular to the friction surface of the member B [1, 2006.01]
F16H 15/22	6-Punkt Untergruppe	 the axes of the members being parallel or approximately parallel [1, 2006.01]
F16H 15/24	5-Punkt Untergruppe	 internally [1, 2006.01]
F16H 15/26	4-Punkt Untergruppe	 in which the member B has a spherical friction surface centered on its axis of revolution [1, 2006.01]
F16H 15/28	5-Punkt Untergruppe	 with external friction surface [1, 2006.01]
F16H 15/30	5-Punkt Untergruppe	 with internal friction surface [1, 2006.01]
F16H 15/32	4-Punkt Untergruppe	 in which the member B has a curved friction surface formed as a surface of a body of revolution generated by a curve which is neither a circular arc centered on its axis of revolution nor a straight line [1, 2006.01]
F16H 15/34	5-Punkt Untergruppe	 with convex friction surface [1, 2006.01]
F16H 15/36	5-Punkt Untergruppe	 with concave friction surface, e.g. a hollow toroid surface [1, 2006.01]
F16H 15/38	6-Punkt Untergruppe	 with two members B having hollow toroid surfaces opposite to each other, the member or members A being adjustably mounted between the surfaces [1, 2006.01]
F16H 15/40	3-Punkt Untergruppe	. . . in which two members co-operate by means of balls, or rollers of uniform effective diameter, not mounted on shafts [1, 2006.01]
F16H 15/42	3-Punkt Untergruppe	. . . in which two members co-operate by means of rings or by means of parts of endless flexible members pressed between the first-mentioned members [1, 2006.01]
F16H 15/44	3-Punkt Untergruppe	. . . in which two members of non-uniform effective diameter directly co-operate with one another [1, 2006.01]
F16H 15/46	2-Punkt Untergruppe	. . Gearings providing a discontinuous or stepped range of gear ratios [1, 2006.01]
F16H 15/48	1-Punkt Untergruppe	. with members having orbital motion [1, 2006.01]
F16H 15/50	2-Punkt Untergruppe	. . Gearings providing a continuous range of gear ratios [1, 2006.01]
F16H 15/52	3-Punkt Untergruppe	. . . in which a member of uniform effective diameter mounted on a shaft may co-operate with different parts of another member [1, 2006.01]
F16H 15/54	3-Punkt Untergruppe	. . . in which two members co-operate by means of rings or by means of parts of endless flexible members pressed between the first-mentioned members [1, 2006.01]
F16H 15/56	2-Punkt Untergruppe	. . Gearings providing a discontinuous or stepped range of gear ratios [1, 2006.01]
F16H 19/00	Hauptgruppe	Gearings comprising essentially only toothed gears or friction members and not capable of

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		conveying indefinitely-continuing rotary motion (with intermittently-driving members F16H 27/00-F16H 31/00; rope or like tackle for lifting or haulage B66D 3/00) [1, 2006.01]
F16H 19/02	1-Punkt Untergruppe	. for interconverting rotary motion and reciprocating motion [1, 2006.01]
F16H 19/04	2-Punkt Untergruppe	. . comprising a rack [1, 2006.01]
F16H 19/06	2-Punkt Untergruppe	. . comprising an endless flexible member [1, 2006.01]
F16H 19/08	1-Punkt Untergruppe	. for interconverting rotary motion and oscillating motion [1, 2006.01]
		<u>Gearing for conveying or converting motion by means of levers, links, cams or screw-and-nut mechanisms</u>
F16H 21/00	Hauptgruppe	Gearings comprising primarily only links or levers, with or without slides (F16H 23/00 takes precedence) [1, 2006.01]
F16H 21/02	1-Punkt Untergruppe	. the movements of two or more independently-moving members being combined into a single movement [1, 2006.01]
F16H 21/04	1-Punkt Untergruppe	. Guiding mechanisms, e.g. for straight-line guidance (for drawing-machines B43L) [1, 2006.01]
F16H 21/06	1-Punkt Untergruppe	. which can be made ineffective when desired [1, 2006.01]
F16H 21/08	2-Punkt Untergruppe	. . by pushing a reciprocating rod out of its operative position [1, 2006.01]
F16H 21/10	1-Punkt Untergruppe	. all movement being in, or parallel to, a single plane [1, 2006.01]
F16H 21/12	2-Punkt Untergruppe	. . for conveying rotary motion [1, 2006.01]
F16H 21/14	3-Punkt Untergruppe	. . . by means of cranks, eccentrics, or like members fixed to one rotary member and guided along tracks on the other [1, 2006.01]
F16H 21/16	2-Punkt Untergruppe	. . for interconverting rotary motion and reciprocating motion [1, 2006.01]
F16H 21/18	3-Punkt Untergruppe	. . . Crank gearings; Eccentric gearings [1, 2006.01]
F16H 21/20	4-Punkt Untergruppe	 with adjustment of throw (adjustable cranks or eccentrics F16C 3/28; adjustable connecting-rods F16C 7/06) [1, 2006.01]
F16H 21/22	4-Punkt Untergruppe	 with one connecting-rod and one guided slide to each crank or eccentric [1, 2006.01]
F16H 21/24	5-Punkt Untergruppe	 without further links or guides [1, 2006.01]
F16H 21/26	5-Punkt Untergruppe	 with toggle action [1, 2006.01]
F16H 21/28	5-Punkt Untergruppe	 with cams or additional guides [1, 2006.01]
F16H 21/30	5-Punkt Untergruppe	 with members having rolling contact [1, 2006.01]
F16H 21/32	5-Punkt Untergruppe	 with additional members comprising only pivoted links or arms [1, 2006.01]
F16H 21/34	4-Punkt Untergruppe	 with two or more connecting-rods to each crank or eccentric [1, 2006.01]
F16H 21/36	4-Punkt Untergruppe	 without swinging connecting-rod, e.g. with epicyclic parallel motion, slot-and- crank motion [1, 2006.01]
F16H 21/38	4-Punkt Untergruppe	 with means for temporary energy accumulation, e.g. to overcome dead-centre positions [1, 2006.01]
F16H 21/40	2-Punkt Untergruppe	. . for interconverting rotary motion and oscillating motion [1, 2006.01]
F16H 21/42	3-Punkt Untergruppe	. . . with adjustable throw [1, 2006.01]
F16H 21/44	2-Punkt Untergruppe	. . for conveying or interconverting oscillating or reciprocating motions [1, 2006.01]
F16H 21/46	1-Punkt Untergruppe	. with movements in three dimensions [1, 2006.01]

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F16H 21/48	2-Punkt Untergruppe	. . for conveying rotary motion [1, 2006.01]
F16H 21/50	2-Punkt Untergruppe	. . for interconverting rotary motion and reciprocating motion [1, 2006.01]
F16H 21/52	2-Punkt Untergruppe	. . for interconverting rotary motion and oscillating motion [1, 2006.01]
F16H 21/54	2-Punkt Untergruppe	. . for conveying or interconverting oscillating or reciprocating motions [1, 2006.01]
F16H 23/00	Hauptgruppe	Wobble-plate gearings; Oblique-crank gearings [1, 2006.01]
F16H 23/02	1-Punkt Untergruppe	. with adjustment of throw by changing the position of the wobble-member (F16H 29/04, F16H 33/10 take precedence) [1, 2006.01]
F16H 23/04	1-Punkt Untergruppe	. with non-rotary wobble-members [1, 2006.01]
F16H 23/06	2-Punkt Untergruppe	. . with sliding members hinged to reciprocating members [1, 2006.01]
F16H 23/08	2-Punkt Untergruppe	. . connected to reciprocating members by connecting-rods [1, 2006.01]
F16H 23/10	1-Punkt Untergruppe	. with rotary wobble-plates with plane surfaces [1, 2006.01]
F16H 25/00	Hauptgruppe	Gearings comprising primarily only cams, cam-followers and screw-and-nut mechanisms [1, 2006.01]
F16H 25/02	1-Punkt Untergruppe	. the movements of two or more independently-moving members being combined into a single movement [1, 2006.01]
F16H 25/04	1-Punkt Untergruppe	. for conveying rotary motion [1, 2006.01]
F16H 25/06	2-Punkt Untergruppe	. . with intermediate members guided along tracks on both rotary members [1, 2006.01]
F16H 25/08	1-Punkt Untergruppe	. for interconverting rotary motion and reciprocating motion (F16H 23/00 takes precedence) [1, 2006.01]
F16H 25/10	2-Punkt Untergruppe	. . with adjustable throw (adjustable cams F16H 53/04) [1, 2006.01]
F16H 25/12	2-Punkt Untergruppe	. . with reciprocation along the axis of rotation, e.g. gearings with helical grooves and automatic reversal (screw mechanisms without automatic reversal F16H 25/20) [1, 2006.01]
F16H 25/14	2-Punkt Untergruppe	. . with reciprocation perpendicular to the axis of rotation (F16H 21/36 takes precedence) [1, 2006.01]
F16H 25/16	1-Punkt Untergruppe	. for interconverting rotary motion and oscillating motion [1, 2006.01]
F16H 25/18	1-Punkt Untergruppe	. for conveying or interconverting oscillating or reciprocating motions [1, 2006.01]
F16H 25/20	2-Punkt Untergruppe	. . Screw mechanisms (with automatic reversal F16H 25/12) [1, 2006.01]
F16H 25/22	3-Punkt Untergruppe	. . . with balls, rollers, or similar members between the co-operating parts; Elements essential to the use of such members [1, 2006.01]
F16H 25/24	3-Punkt Untergruppe	. . . Elements essential to such mechanisms, e.g. screws, nuts (F16H 25/22 takes precedence) [1, 2006.01]
		<u>Gearings with intermittently-driving members</u>
F16H 27/00	Hauptgruppe	Step-by-step mechanisms without freewheel members, e.g. Geneva drives (rotary gearings with cyclically-varying velocity ratio F16H 35/02; impulse couplings F16D 5/00; clockwork escapements G04B 15/00) [1, 2006.01]
F16H 27/02	1-Punkt Untergruppe	. with at least one reciprocating or oscillating transmission member [1, 2006.01]
F16H 27/04	1-Punkt Untergruppe	. for converting continuous rotation into a step-by-step rotary movement [1, 2006.01]
F16H 27/06	2-Punkt Untergruppe	. . Mechanisms with driving pins in driven slots, e.g. Geneva drives [1, 2006.01]
F16H 27/08	2-Punkt Untergruppe	. . with driving toothed gears with interrupted toothing [1, 2006.01]

Symbol	Typ	Titel
F16H 27/10	2-Punkt Untergruppe	. . obtained by means of disengageable transmission members, combined or not combined with mechanisms according to group F16H 27/06 or F16H 27/08 [1, 2006.01]
F16H 29/00	Hauptgruppe	Gearings for conveying rotary motion with intermittently-driving members, e.g. with freewheel action (freewheels F16D 41/00) [1, 2006.01]
F16H 29/02	1-Punkt Untergruppe	. between one of the shafts and an oscillating or reciprocating intermediate member, not rotating with either of the shafts (F16H 29/20, F16H 29/22 take precedence) [1, 2006.01]
F16H 29/04	2-Punkt Untergruppe	. . in which the transmission ratio is changed by adjustment of a crank, an eccentric, a wobble-plate, or a cam, on one of the shafts [1, 2006.01]
F16H 29/06	3-Punkt Untergruppe	. . . with concentric shafts, an annular intermediate member moving around and being supported on an adjustable crank or eccentric [1, 2006.01]
F16H 29/08	2-Punkt Untergruppe	. . in which the transmission ratio is changed by adjustment of the path of movement, the location of the pivot, or the effective length, of an oscillating connecting member [1, 2006.01]
F16H 29/10	2-Punkt Untergruppe	. . in which the transmission ratio is changed by directly acting on the intermittently driving members [1, 2006.01]
F16H 29/12	1-Punkt Untergruppe	. between rotary driving and driven members (F16H 29/20, F16H 29/22 take precedence) [1, 2006.01]
F16H 29/14	2-Punkt Untergruppe	. . in which the transmission ratio is changed by adjustment of an otherwise stationary guide member for the intermittently-driving members [1, 2006.01]
F16H 29/16	2-Punkt Untergruppe	. . in which the transmission ratio is changed by adjustment of the distance between the axes of the rotary members [1, 2006.01]
F16H 29/18	3-Punkt Untergruppe	. . . in which the intermittently-driving members slide along approximately radial guides while rotating with one of the rotary members [1, 2006.01]
F16H 29/20	1-Punkt Untergruppe	. the intermittently-acting members being shaped as worms, screws, or racks [1, 2006.01]
F16H 29/22	1-Punkt Untergruppe	. with automatic speed change [1, 2006.01]
F16H 31/00	Hauptgruppe	Other gearings with freewheeling members or other intermittently-driving members (F16H 21/00, F16H 23/00, F16H 25/00 take precedence; gearings involving the use of automatic changing-mechanisms, e.g. cyclically-actuated reversal gearings, <u>see</u> the appropriate groups) [1, 2006.01]
F16H 33/00	Hauptgruppe	Gearings based on repeated accumulation and delivery of energy [1, 2006.01]
F16H 33/02	1-Punkt Untergruppe	. Rotary transmissions with mechanical accumulators, e.g. weights, springs, intermittently-connected flywheels [1, 2006.01]
F16H 33/04	2-Punkt Untergruppe	. . Gearings for conveying rotary motion with variable velocity ratio, in which self-regulation is sought [1, 2006.01]
F16H 33/06	3-Punkt Untergruppe	. . . based essentially on spring action (ratchet slip couplings F16D 7/04) [1, 2006.01]
F16H 33/08	3-Punkt Untergruppe	. . . based essentially on inertia [1, 2006.01]
F16H 33/10	4-Punkt Untergruppe	 with gyroscopic action, e.g. comprising wobble-plates, oblique cranks [1, 2006.01]
F16H 33/12	4-Punkt Untergruppe	 with a driving member connected differentially with both a driven member and an oscillatory member with large resistance to movement, e.g. Constantinesco gearing [1, 2006.01]
F16H 33/14	4-Punkt Untergruppe	 having orbital members influenced by regulating masses [1, 2006.01]
F16H 33/16	5-Punkt Untergruppe	 which have their own free motion, or consist of fluid [1, 2006.01]
F16H 33/18	5-Punkt Untergruppe	 of which the motion is constrained [1, 2006.01]
F16H 33/20	1-Punkt Untergruppe	. for interconversion, based essentially on inertia, of rotary motion and reciprocating or oscillating motion [1, 2006.01]

Symbol	Typ	Titel
F16H 35/00	Hauptgruppe	Gearings or mechanisms with other special functional features [1, 2006.01]
F16H 35/02	1-Punkt Untergruppe	. for conveying rotary motion with cyclically-varying velocity ratio (speed-changing mechanisms operating cyclically, <u>see</u> the appropriate groups) [1, 2006.01]
F16H 35/06	1-Punkt Untergruppe	. Gearings designed to allow relative movement between supports thereof without ill effects (F16H 1/26, F16H 1/48 take precedence) [1, 2006.01]
F16H 35/08	1-Punkt Untergruppe	. for adjustment of members on moving parts from a stationary place [1, 2006.01]
F16H 35/10	1-Punkt Untergruppe	. Arrangements or devices for absorbing overload or preventing damage by overload (couplings for transmitting rotation F16D) [1, 2006.01]
F16H 35/12	1-Punkt Untergruppe	. Transmitting mechanisms with delayed effect (vibration- or shock-dampers in general F16F) [1, 2006.01]
F16H 35/14	1-Punkt Untergruppe	. Mechanisms with only two stable positions, e.g. acting at definite angular positions [1, 2006.01]
F16H 35/16	1-Punkt Untergruppe	. Mechanisms for movements or movement relations conforming to mathematical formulae (devices in which computing operations are performed mechanically G06G 3/00) [1, 2006.01]
F16H 35/18	1-Punkt Untergruppe	. Turning devices for rotatable members, e.g. shafts (starting devices for internal-combustion engines F02N) [1, 2006.01]
F16H 37/00	Hauptgruppe	Combinations of mechanical gearings, not provided for in groups F16H 1/00-F16H 35/00 (combinations of mechanical gearing with fluid clutches or fluid gearing F16H 47/00; applications of underdrives or overdrives in motor vehicles, combinations with differential gearings in motor vehicles B60K) [1, 2006.01]
F16H 37/02	1-Punkt Untergruppe	. comprising essentially only toothed or friction gearings [1, 2006.01]
F16H 37/04	2-Punkt Untergruppe	. . Combinations of toothed gearings only (F16H 37/06 takes precedence) [1, 2006.01]
F16H 37/06	2-Punkt Untergruppe	. . with a plurality of driving or driven shafts; with arrangements for dividing torque between two or more intermediate shafts [1, 2006.01]
F16H 37/08	3-Punkt Untergruppe	. . . with differential gearing [1, 2006.01]
F16H 37/10	4-Punkt Untergruppe	 at both ends of intermediate shafts [1, 2006.01]
F16H 37/12	1-Punkt Untergruppe	. Gearings comprising primarily toothed or friction gearing, links or levers, and cams, or members of at least two of these three types (F16H 21/14, F16H 21/28, F16H 21/30 take precedence; toothed or friction gearing or cam gearing, with only an additional lever or link, <u>see</u> the appropriate group for the main gearing) [1, 2006.01]
F16H 37/14	2-Punkt Untergruppe	. . the movements of two or more independently-moving members being combined into a single movement [1, 2006.01]
F16H 37/16	2-Punkt Untergruppe	. . with a driving or driven member which both rotates or oscillates on its axis and reciprocates [1, 2006.01]
		Fluid gearing [3]
F16H 39/00	Hauptgruppe	Rotary fluid gearing using pumps and motors of the volumetric type, i.e. passing a predetermined volume of fluid per revolution (control of exclusively fluid gearing F16H 61/38; fluid couplings or clutches with pumping sets of volumetric type F16D 31/00; application to lifting or pushing equipment B66F) [1, 5, 2006.01]
F16H 39/01	1-Punkt Untergruppe	. Pneumatic gearing; Gearing working with subatmospheric pressure (pneumatic hammers B25D 9/00) [2, 2006.01]
F16H 39/02	1-Punkt Untergruppe	. with liquid motors at a distance from liquid pumps [1, 2006.01]
F16H 39/04	1-Punkt Untergruppe	. with liquid motor and pump combined in one unit [1, 2006.01]
F16H 39/06	2-Punkt Untergruppe	. . pump and motor being of the same type [1, 2006.01]

Symbol	Typ	Titel
F16H 39/08	3-Punkt Untergruppe	. . . each with one main shaft and provided with pistons reciprocating in cylinders [1, 2006.01]
F16H 39/10	4-Punkt Untergruppe	 with cylinders arranged around, and parallel or approximately parallel to, the main axis of the gearing [1, 2006.01]
F16H 39/12	5-Punkt Untergruppe	 with stationary cylinders [1, 2006.01]
F16H 39/14	5-Punkt Untergruppe	 with cylinders carried in rotary cylinder blocks or cylinder-bearing members [1, 2006.01]
F16H 39/16	4-Punkt Untergruppe	 with cylinders arranged perpendicular to the main axis of the gearing [1, 2006.01]
F16H 39/18	5-Punkt Untergruppe	 the connections of the pistons being at the outer ends of the cylinders [1, 2006.01]
F16H 39/20	5-Punkt Untergruppe	 the connections of the pistons being at the inner ends of the cylinders [1, 2006.01]
F16H 39/22	3-Punkt Untergruppe	. . . with liquid chambers shaped as bodies of revolution concentric with the main axis of the gearing [1, 2006.01]
F16H 39/24	4-Punkt Untergruppe	 with rotary displacement members, e.g. provided with axially or radially movable vanes passing movable sealing members [1, 2006.01]
F16H 39/26	3-Punkt Untergruppe	. . . with liquid chambers not shaped as bodies of revolution or shaped as bodies of revolution eccentric to the main axis of the gearing [1, 2006.01]
F16H 39/28	4-Punkt Untergruppe	 with liquid chambers formed in rotary members [1, 2006.01]
F16H 39/30	4-Punkt Untergruppe	 with liquid chambers formed in stationary members [1, 2006.01]
F16H 39/32	5-Punkt Untergruppe	 with sliding vanes carried by the rotor [1, 2006.01]
F16H 39/34	3-Punkt Untergruppe	. . . in which a rotor on one shaft co-operates with a rotor on another shaft [1, 2006.01]
F16H 39/36	4-Punkt Untergruppe	 toothed-gear type [1, 2006.01]
F16H 39/38	4-Punkt Untergruppe	 Displacement screw-pump type [1, 2006.01]
F16H 39/40	3-Punkt Untergruppe	. . . Hydraulic differential gearings, e.g. having a rotary input housing with interconnected liquid chambers for both outputs [1, 2006.01]
F16H 39/42	2-Punkt Untergruppe	. . pump and motor being of different types [1, 2006.01]
F16H 41/00	Hauptgruppe	Rotary fluid gearing of the hydrokinetic type (control of exclusively fluid gearing F16H 61/38; rotary fluid couplings or clutches of the hydrokinetic type F16D 33/00) [1, 5, 2006.01]
F16H 41/02	1-Punkt Untergruppe	. with pump and turbine connected by conduits or ducts [1, 2006.01]
F16H 41/04	1-Punkt Untergruppe	. Combined pump-turbine units [1, 2006.01]
F16H 41/22	2-Punkt Untergruppe	. . Gearing systems consisting of a plurality of hydrokinetic units operating alternatively, e.g. made effective or ineffective by filling or emptying or by mechanical clutches [1, 2006.01]
F16H 41/24	1-Punkt Untergruppe	. Details [1, 2006.01]
F16H 41/26	2-Punkt Untergruppe	. . Shape of runner blades or channels with respect to function [1, 2006.01]
F16H 41/28	2-Punkt Untergruppe	. . with respect to manufacture, e.g. blade attachment [1, 2006.01]
F16H 41/30	2-Punkt Untergruppe	. . relating to venting, lubrication, cooling, circulation of the cooling medium [1, 2006.01]
F16H 41/32	1-Punkt Untergruppe	. Selection of working fluids (chemical aspects, <u>see</u> the relevant classes) [1, 2006.01]
F16H 43/00	Hauptgruppe	Other fluid gearing, e.g. with oscillating input or output [1, 2, 2006.01]
F16H 43/02	1-Punkt Untergruppe	. Fluid gearing actuated by pressure waves [2, 2006.01]

Symbol	Typ	Titel
F16H 45/00	Hauptgruppe	Combinations of fluid gearings for conveying rotary motion with couplings or clutches (F16H 41/22 takes precedence; conjoint control of driveline clutches and change-speed gearing in vehicles B60W 10/02, B60W 10/10) [1, 2, 2006.01]
F16H 45/02	1-Punkt Untergruppe	. with mechanical clutches for bridging a fluid gearing of the hydrokinetic type (control of torque converter lock-up clutches F16H 61/14) [1, 2006.01]
F16H 47/00	Hauptgruppe	Combinations of mechanical gearing with fluid clutches or fluid gearing (conjoint control of driveline clutches and change-speed gearing in vehicles B60W 10/02, B60W 10/10) [1, 2, 2006.01]
F16H 47/02	1-Punkt Untergruppe	. the fluid gearing being of the volumetric type [1, 2006.01]
F16H 47/04	2-Punkt Untergruppe	. . the mechanical gearing being of the type with members having orbital motion [1, 2006.01]
F16H 47/06	1-Punkt Untergruppe	. the fluid gearing being of the hydrokinetic type [1, 2006.01]
F16H 47/07	2-Punkt Untergruppe	. . using two or more power-transmitting fluid circuits (F16H 47/10 takes precedence) [2, 2006.01]
F16H 47/08	2-Punkt Untergruppe	. . the mechanical gearing being of the type with members having orbital motion [1, 2006.01]
F16H 47/10	3-Punkt Untergruppe	. . . using two or more power-transmitting fluid circuits [2, 2006.01]
F16H 47/12	3-Punkt Untergruppe	. . . the members with orbital motion having vanes interacting with the fluid [2, 2006.01]
F16H 48/00	Hauptgruppe	Differential gearings (cooling or lubricating of differential gearing F16H 57/04) [6, 2006.01, 2012.01]
F16H 48/05	1-Punkt Untergruppe	. Multiple interconnected differential sets [2012.01]
F16H 48/06	1-Punkt Untergruppe	. with gears having orbital motion [6, 2006.01]
F16H 48/08	2-Punkt Untergruppe	. . with orbital conical gears [6, 2006.01]
F16H 48/10	2-Punkt Untergruppe	. . with orbital spur gears [6, 2006.01, 2012.01]
F16H 48/11	3-Punkt Untergruppe	. . . having intermeshing planet gears [2012.01]
F16H 48/12	1-Punkt Untergruppe	. without gears having orbital motion [6, 2006.01, 2012.01]
F16H 48/14	2-Punkt Untergruppe	. . with cams [6, 2006.01]
F16H 48/16	2-Punkt Untergruppe	. . with freewheels [6, 2006.01]
F16H 48/18	2-Punkt Untergruppe	. . with fluid gearing [6, 2006.01]
F16H 48/19	2-Punkt Untergruppe	. . consisting of two linked clutches [2012.01]
F16H 48/20	1-Punkt Untergruppe	. Arrangements for suppressing or influencing the differential action, e.g. locking devices [6, 2006.01, 2012.01]
F16H 48/22	2-Punkt Untergruppe	. . using friction clutches or brakes [6, 2006.01]
F16H 48/24	2-Punkt Untergruppe	. . using positive clutches or brakes [6, 2006.01]
F16H 48/26	2-Punkt Untergruppe	. . using fluid action, e.g. viscous clutches [6, 2006.01]
F16H 48/27	2-Punkt Untergruppe	. . using internally-actuatable fluid pressure, e.g. internal pump types [2012.01]
F16H 48/28	2-Punkt Untergruppe	. . using self-locking gears or self-braking gears [6, 2006.01, 2012.01]
F16H 48/285	3-Punkt Untergruppe	. . . with self-braking intermeshing gears having parallel axes and having worms or helical teeth [2012.01]
F16H 48/29	3-Punkt Untergruppe	. . . with self-braking intermeshing gears having perpendicular arranged axes and having worms or helical teeth [2012.01]

Symbol	Typ	Titel
F16H 48/295	2-Punkt Untergruppe	. . using multiple means for force boosting [2012.01]
F16H 48/30	2-Punkt Untergruppe	. . using externally-actuatable means [6, 2006.01, 2012.01]
F16H 48/32	3-Punkt Untergruppe	. . . using fluid pressure actuators [2012.01]
F16H 48/34	3-Punkt Untergruppe	. . . using electromagnetic or electric actuators [2012.01]
F16H 48/36	1-Punkt Untergruppe	. characterised by intentionally generating speed difference between outputs [2012.01]
F16H 48/38	1-Punkt Untergruppe	. Constructional details (the outer casing comprising the differential and supporting input and output shafts F16H 57/037) [2012.01]
F16H 48/40	2-Punkt Untergruppe	. . characterised by features of the rotating cases [2012.01]
F16H 48/42	2-Punkt Untergruppe	. . characterised by features of the input shafts, e.g. mounting of drive gears thereon [2012.01]
F16H 49/00	Hauptgruppe	Other gearing [1, 2006.01] <u>Details of gearing or mechanisms</u>
F16H 51/00	Hauptgruppe	Levers of gearing mechanisms (shafts, Bowden mechanisms, cranks, eccentrics, bearings, pivotal connections, crossheads, connecting-rods F16C; manipulating levers G05G) [1, 2006.01]
F16H 51/02	1-Punkt Untergruppe	. adjustable [1, 2006.01]
F16H 53/00	Hauptgruppe	Cams or cam-followers, e.g. rollers for gearing mechanisms (shafts, Bowden mechanisms, cranks, eccentrics, bearings, pivotal connections, crossheads, connecting-rods F16C; cams specially adapted for reciprocating-piston liquid engines F03C 1/30) [1, 2006.01]
F16H 53/02	1-Punkt Untergruppe	. Single-track cams for single-revolution cycles; Camshafts with such cams [1, 2006.01]
F16H 53/04	2-Punkt Untergruppe	. . Adjustable cams [1, 2006.01]
F16H 53/06	1-Punkt Untergruppe	. Cam-followers (F16H 53/08 takes precedence) [1, 2006.01]
F16H 53/08	1-Punkt Untergruppe	. Multi-track cams, e.g. for cycles consisting of several revolutions; Cam-followers specially adapted for such cams [1, 2006.01]
F16H 55/00	Hauptgruppe	Elements with teeth or friction surfaces for conveying motion; Worms, pulleys or sheaves for gearing mechanisms (of screw-and-nut gearing F16H 25/00; shafts, Bowden mechanisms, cranks, eccentrics, bearings, pivotal connections, crossheads, connecting-rods F16C; chains, belts F16G; pulley-blocks for lifting or hauling appliances B66D 3/04) [1, 4, 2006.01]
F16H 55/02	1-Punkt Untergruppe	. Toothed members; Worms [1, 2006.01]
F16H 55/06	2-Punkt Untergruppe	. . Use of materials; Use of treatments of toothed members or worms to affect their intrinsic material properties [1, 3, 2006.01]
F16H 55/08	2-Punkt Untergruppe	. . Profiling [1, 3, 2006.01]
F16H 55/10	2-Punkt Untergruppe	. . Constructively simple tooth shapes, e.g. shaped as pins, as balls [1, 3, 2006.01]
F16H 55/12	2-Punkt Untergruppe	. . with body or rim assembled out of detachable parts [1, 3, 2006.01]
F16H 55/14	2-Punkt Untergruppe	. . Construction providing resilience or vibration-damping (F16H 55/06 takes precedence; resilient coupling of wheel or wheel-rim with shaft F16D 3/50, F16D 3/80) [1, 3, 2006.01]
F16H 55/16	3-Punkt Untergruppe	. . . relating to teeth only [1, 3, 2006.01]
F16H 55/17	2-Punkt Untergruppe	. . Toothed wheels (worm wheels F16H 55/22; chain wheels F16H 55/30) [3, 2006.01]
F16H 55/18	3-Punkt Untergruppe	. . . Special devices for taking-up backlash [1, 2006.01]
F16H 55/20	4-Punkt Untergruppe	 for bevel gears [1, 2006.01]

Symbol	Typ	Titel
F16H 55/22	2-Punkt Untergruppe	. . for transmissions with crossing shafts, especially worms, worm-gears (bevel gears, crown wheels, helical gears F16H 55/17) [1, 2006.01]
F16H 55/24	3-Punkt Untergruppe	. . . Special devices for taking up backlash [1, 2006.01]
F16H 55/26	2-Punkt Untergruppe	. . Racks [1, 2006.01]
F16H 55/28	3-Punkt Untergruppe	. . . Special devices for taking up backlash [1, 2006.01]
F16H 55/30	2-Punkt Untergruppe	. . Chain wheels (specially adapted for cycles B62M) [1, 2006.01]
F16H 55/32	1-Punkt Untergruppe	. Friction members (friction surfaces F16D 69/00) [1, 2006.01]
F16H 55/34	2-Punkt Untergruppe	. . Non-adjustable friction discs [1, 2006.01]
F16H 55/36	2-Punkt Untergruppe	. . Pulleys (with features essential for adjustment F16H 55/52) [1, 2006.01]
F16H 55/38	3-Punkt Untergruppe	. . . Means or measures for increasing adhesion (in general F16D 69/00) [1, 2006.01]
F16H 55/40	3-Punkt Untergruppe	. . . with spokes (F16H 55/48 takes precedence) [1, 2006.01]
F16H 55/42	3-Punkt Untergruppe	. . . Laminated pulleys [1, 2006.01]
F16H 55/44	3-Punkt Untergruppe	. . . Sheet-metal pulleys [1, 2006.01]
F16H 55/46	3-Punkt Untergruppe	. . . Split pulleys [1, 2006.01]
F16H 55/48	3-Punkt Untergruppe	. . . manufactured exclusively or in part of non-metallic material, e.g. plastics (F16H 55/38, F16H 55/42, F16H 55/46 take precedence) [1, 2006.01]
F16H 55/49	3-Punkt Untergruppe	. . . Features essential to V-belt pulleys [2, 2006.01]
F16H 55/50	3-Punkt Untergruppe	. . . Features essential to rope pulleys [1, 2006.01]
F16H 55/52	2-Punkt Untergruppe	. . Pulleys or friction discs of adjustable construction [1, 2006.01]
F16H 55/54	3-Punkt Untergruppe	. . . of which the bearing parts are radially adjustable [1, 2006.01]
F16H 55/56	3-Punkt Untergruppe	. . . of which the bearing parts are relatively axially adjustable [1, 2006.01]
F16H 57/00	Hauptgruppe	General details of gearing (of screw-and-nut gearing F16H 25/00; of fluid gearing F16H 39/00-F16H 43/00) [1, 2006.01, 2012.01]
F16H 57/01	1-Punkt Untergruppe	. Monitoring wear or stress of gearing elements, e.g. for triggering maintenance [2012.01]
F16H 57/02	1-Punkt Untergruppe	. Gearboxes; Mounting gearing therein [1, 2006.01, 2012.01]
F16H 57/021	2-Punkt Untergruppe	. . Shaft support structures, e.g. partition walls, bearing eyes, casing walls or covers with bearings [2012.01]
F16H 57/022	3-Punkt Untergruppe	. . . Adjustment of gear shafts or bearings (for compensating misalignment of axes of toothed gears without orbital motion F16H 1/26; for compensating misalignment of axes of planetary gears F16H 1/48) [2012.01]
F16H 57/023	2-Punkt Untergruppe	. . Mounting or installation of gears or shafts in gearboxes, e.g. methods or means for assembly [2012.01]
F16H 57/025	2-Punkt Untergruppe	. . Support of gearboxes, e.g. torque arms, or attachment to other devices (mounting of transmissions in vehicles B60K 17/00) [2012.01]
F16H 57/027	2-Punkt Untergruppe	. . characterised by means for venting gearboxes, e.g. air breathers [2012.01]
F16H 57/028	2-Punkt Untergruppe	. . characterised by means for reducing vibration or noise [2012.01]
F16H 57/029	2-Punkt Untergruppe	. . characterised by means for sealing gearboxes, e.g. to improve airtightness [2012.01]

Symbol	Typ	Titel
F16H 57/03	2-Punkt Untergruppe	. . characterised by means for reinforcing gearboxes, e.g. ribs [2012.01]
F16H 57/031	2-Punkt Untergruppe	. . characterised by covers or lids for gearboxes [2012.01]
F16H 57/032	2-Punkt Untergruppe	. . characterised by the materials used [2012.01]
F16H 57/033	2-Punkt Untergruppe	. . Series gearboxes, e.g. gearboxes based on the same design being available in different sizes or gearboxes using a combination of several standardised units [2012.01]
F16H 57/035	2-Punkt Untergruppe	. . Gearboxes for gearing with endless flexible members [2012.01]
F16H 57/037	2-Punkt Untergruppe	. . Gearboxes for accommodating differential gearing (rotating cases for differential gearings F16H 48/40) [2012.01]
F16H 57/038	2-Punkt Untergruppe	. . Gearboxes for accommodating bevel gears (F16H 57/037 takes precedence) [2012.01]
F16H 57/039	2-Punkt Untergruppe	. . Gearboxes for accommodating worm gears [2012.01]
F16H 57/04	1-Punkt Untergruppe	. Features relating to lubrication or cooling (control of lubrication or cooling in hydrostatic gearing F16H 61/4165) [1, 2006.01, 2010.01]
F16H 57/05	2-Punkt Untergruppe	. . of chains (for conveyors B65G 45/08) [1, 2006.01]
F16H 57/08	1-Punkt Untergruppe	. of gearings with members having orbital motion [1, 2006.01]
F16H 57/10	2-Punkt Untergruppe	. . Braking arrangements [1, 2006.01]
F16H 57/12	1-Punkt Untergruppe	. Arrangements for adjusting or for taking-up backlash not provided for elsewhere [2, 2006.01]
		<u>Control of gearing conveying rotary motion [5]</u>
F16H 59/00	Hauptgruppe	Control inputs to change-speed- or reversing-gearings for conveying rotary motion [5, 2006.01]
F16H 59/02	1-Punkt Untergruppe	. Selector apparatus [5, 2006.01]
F16H 59/04	2-Punkt Untergruppe	. . Ratio selector apparatus [5, 2006.01]
F16H 59/06	3-Punkt Untergruppe	. . . the ratio being infinitely variable [5, 2006.01]
F16H 59/08	2-Punkt Untergruppe	. . Range selector apparatus [5, 2006.01]
F16H 59/10	3-Punkt Untergruppe	. . . comprising levers [5, 2006.01]
F16H 59/12	3-Punkt Untergruppe	. . . comprising push button devices [5, 2006.01]
F16H 59/14	1-Punkt Untergruppe	. Inputs being a function of torque or torque demand [5, 2006.01]
F16H 59/16	2-Punkt Untergruppe	. . Dynamometric measurement of torque [5, 2006.01]
F16H 59/18	2-Punkt Untergruppe	. . dependent on the position of the accelerator pedal [5, 2006.01]
F16H 59/20	3-Punkt Untergruppe	. . . Kickdown [5, 2006.01]
F16H 59/22	3-Punkt Untergruppe	. . . Idle position [5, 2006.01]
F16H 59/24	2-Punkt Untergruppe	. . dependent on the throttle opening [5, 2006.01]
F16H 59/26	2-Punkt Untergruppe	. . dependent on pressure [5, 2006.01]
F16H 59/28	3-Punkt Untergruppe	. . . Gasifier pressure in gas turbines [5, 2006.01]
F16H 59/30	3-Punkt Untergruppe	. . . Intake manifold vacuum [5, 2006.01]
F16H 59/32	3-Punkt Untergruppe	. . . Supercharger pressure in internal combustion engines [5, 2006.01]

Symbol	Typ	Titel
F16H 59/34	2-Punkt Untergruppe	. . dependent on fuel feed [5, 2006.01]
F16H 59/36	1-Punkt Untergruppe	. Inputs being a function of speed [5, 2006.01]
F16H 59/38	2-Punkt Untergruppe	. . of gearing elements [5, 2006.01]
F16H 59/40	3-Punkt Untergruppe	. . . Output shaft speed [5, 2006.01]
F16H 59/42	3-Punkt Untergruppe	. . . Input shaft speed [5, 2006.01]
F16H 59/44	2-Punkt Untergruppe	. . dependent on machine speed (F16H 59/46 takes precedence) [5, 2006.01]
F16H 59/46	2-Punkt Untergruppe	. . dependent on a comparison between speeds [5, 2006.01]
F16H 59/48	1-Punkt Untergruppe	. Inputs being a function of acceleration [5, 2006.01]
F16H 59/50	1-Punkt Untergruppe	. Inputs being a function of the status of the machine, e.g. position of doors or safety belts [5, 2006.01]
F16H 59/52	2-Punkt Untergruppe	. . dependent on the weight of the machine, e.g. change in weight resulting from passengers boarding a bus [5, 2006.01]
F16H 59/54	2-Punkt Untergruppe	. . dependent on signals from the brakes, e.g. parking brakes [5, 2006.01]
F16H 59/56	2-Punkt Untergruppe	. . dependent on signals from the main clutch [5, 2006.01]
F16H 59/58	2-Punkt Untergruppe	. . dependent on signals from the steering [5, 2006.01]
F16H 59/60	1-Punkt Untergruppe	. Inputs being a function of ambient conditions [5, 2006.01]
F16H 59/62	2-Punkt Untergruppe	. . Atmospheric pressure [5, 2006.01]
F16H 59/64	2-Punkt Untergruppe	. . Atmospheric temperature [5, 2006.01]
F16H 59/66	2-Punkt Untergruppe	. . Road conditions, e.g. slope, slippery [5, 2006.01]
F16H 59/68	1-Punkt Untergruppe	. Inputs being a function of gearing status [5, 2006.01]
F16H 59/70	2-Punkt Untergruppe	. . dependent on the ratio established [5, 2006.01]
F16H 59/72	2-Punkt Untergruppe	. . dependent on oil characteristics, e.g. temperature, viscosity [5, 2006.01]
F16H 59/74	1-Punkt Untergruppe	. Inputs being a function of engine parameters (F16H 59/14 takes precedence) [5, 2006.01]
F16H 59/76	2-Punkt Untergruppe	. . Number of cylinders operating [5, 2006.01]
F16H 59/78	2-Punkt Untergruppe	. . Temperature [5, 2006.01]
F16H 61/00	Hauptgruppe	Control functions within change-speed- or reversing-gearings for conveying rotary motion [5, 2006.01]
F16H 61/02	1-Punkt Untergruppe	. characterised by the signals used [5, 2006.01]
F16H 61/04	1-Punkt Untergruppe	. Smoothing ratio shift [5, 2006.01]
F16H 61/06	2-Punkt Untergruppe	. . by controlling rate of change of fluid pressure [5, 2006.01]
F16H 61/08	2-Punkt Untergruppe	. . Timing control [5, 2006.01]
F16H 61/10	1-Punkt Untergruppe	. Controlling shift hysteresis [5, 2006.01]
F16H 61/12	1-Punkt Untergruppe	. Detecting malfunction or potential malfunction, e.g. fail safe (in control of hydrostatic gearing F16H 61/4192) [5, 2006.01, 2010.01]
F16H 61/14	1-Punkt Untergruppe	. Control of torque converter lock-up clutches [5, 2006.01]

Symbol	Typ	Titel
F16H 61/16	1-Punkt Untergruppe	. Inhibiting shift during unfavourable conditions (F16H 61/18 takes precedence) [5, 2006.01]
F16H 61/18	1-Punkt Untergruppe	. Preventing unintentional or unsafe shift (constructional features of the final output mechanisms F16H 63/30) [5, 2006.01]
F16H 61/20	1-Punkt Untergruppe	. Preventing gear creeping [5, 2006.01]
F16H 61/21	1-Punkt Untergruppe	. Providing engine brake control [7, 2006.01]
F16H 61/22	1-Punkt Untergruppe	. Locking (F16H 63/34 takes precedence) [5, 2006.01]
F16H 61/24	1-Punkt Untergruppe	. Providing feel, e.g. to enable selection [5, 2006.01]
F16H 61/26	1-Punkt Untergruppe	. Generation or transmission of movements for final actuating mechanisms [5, 2006.01]
F16H 61/28	2-Punkt Untergruppe	. . with at least one movement of the final actuating mechanism being caused by a non-mechanical force, e.g. power-assisted [5, 2006.01]
F16H 61/30	3-Punkt Untergruppe	. . . Hydraulic motors therefor [5, 2006.01]
F16H 61/32	3-Punkt Untergruppe	. . . Electric motors therefor [5, 2006.01]
F16H 61/34	2-Punkt Untergruppe	. . comprising two mechanisms, one for the preselection movement, and one for the shifting movement (F16H 61/36 takes precedence) [5, 2006.01]
F16H 61/36	2-Punkt Untergruppe	. . with at least one movement being transmitted by a cable [5, 2006.01]
F16H 61/38	1-Punkt Untergruppe	. Control of exclusively fluid gearing [5, 2006.01]
F16H 61/40	2-Punkt Untergruppe	. . hydrostatic (involving modification of the gearing F16H 39/02, F16H 39/04) [5, 2006.01, 2010.01]
F16H 61/4008	3-Punkt Untergruppe	. . . Control of circuit pressure [2010.01]
F16H 61/4017	4-Punkt Untergruppe	 Control of high pressure, e.g. avoiding excess pressure by a relief valve [2010.01]
F16H 61/4026	4-Punkt Untergruppe	 Control of low pressure [2010.01]
F16H 61/4035	3-Punkt Untergruppe	. . . Control of circuit flow [2010.01]
F16H 61/4043	3-Punkt Untergruppe	. . . Control of a bypass valve [2010.01]
F16H 61/4052	4-Punkt Untergruppe	 by using a variable restriction, e.g. an orifice valve [2010.01]
F16H 61/4061	3-Punkt Untergruppe	. . . Control related to directional control valves, e.g. change-over valves, for crossing the feeding conduits (forward reverse switching by using swash plate F16H 61/438) [2010.01]
F16H 61/4069	3-Punkt Untergruppe	. . . Valves related to the control of neutral, e.g. shut off valves (zero tilt rotation holding means F16H 61/439) [2010.01]
F16H 61/4078	3-Punkt Untergruppe	. . . Fluid exchange between hydrostatic circuits and external sources or consumers [2010.01]
F16H 61/4096	4-Punkt Untergruppe	 with pressure accumulators [2010.01]
F16H 61/4104	4-Punkt Untergruppe	 Flushing, e.g. by using flushing valves or by connection to exhaust [2010.01]
F16H 61/4131	4-Punkt Untergruppe	 Fluid exchange by aspiration from reservoirs, e.g. sump [2010.01]
F16H 61/4139	4-Punkt Untergruppe	 Replenishing or scavenging pumps, e.g. auxiliary charge pumps [2010.01]
F16H 61/4148	3-Punkt Untergruppe	. . . Open loop circuits [2010.01]
F16H 61/4157	3-Punkt Untergruppe	. . . Control of braking, e.g. preventing pump over-speeding when motor acts as a pump [2010.01]

Symbol	Typ	Titel
F16H 61/4165	3-Punkt Untergruppe	. . . Control of cooling or lubricating [2010.01]
F16H 61/4174	3-Punkt Untergruppe	. . . Control of venting, e.g. removing trapped air [2010.01]
F16H 61/4183	3-Punkt Untergruppe	. . . Preventing or reducing vibrations or noise, e.g. avoiding cavitations [2010.01]
F16H 61/4192	3-Punkt Untergruppe	. . . Detecting malfunction or potential malfunction, e.g. fail safe [2010.01]
F16H 61/42	3-Punkt Untergruppe	. . . involving adjustment of a pump or motor with adjustable output or capacity [5, 2006.01, 2010.01]
F16H 61/421	4-Punkt Untergruppe	 Motor capacity control by electro-hydraulic control means, e.g. using solenoid valves [2010.01]
F16H 61/423	4-Punkt Untergruppe	 Motor capacity control by fluid pressure control means [2010.01]
F16H 61/425	4-Punkt Untergruppe	 Motor capacity control by electric actuators [2010.01]
F16H 61/427	4-Punkt Untergruppe	 Motor capacity control by mechanical control means, e.g. by levers or pedals [2010.01]
F16H 61/431	4-Punkt Untergruppe	 Pump capacity control by electro-hydraulic control means, e.g. using solenoid valve [2010.01]
F16H 61/433	4-Punkt Untergruppe	 Pump capacity control by fluid pressure control means [2010.01]
F16H 61/435	4-Punkt Untergruppe	 Pump capacity control by electric actuators [2010.01]
F16H 61/437	4-Punkt Untergruppe	 Pump capacity control by mechanical control means, e.g. by levers or pedals [2010.01]
F16H 61/438	4-Punkt Untergruppe	 Control of forward-reverse switching, e.g. control of the swash plate causing discharge in two directions (using a directional control valve F16H 61/4061) [2010.01]
F16H 61/439	4-Punkt Untergruppe	 Control of the neutral position, e.g. by zero tilt rotation holding means (using a neutral valve or a shutoff valve F16H 61/4069) [2010.01]
F16H 61/44	3-Punkt Untergruppe	. . . with more than one pump or motor unit in operation [5, 2006.01]
F16H 61/444	4-Punkt Untergruppe	 by changing the number of pump or motor units in operation [2010.01]
F16H 61/448	4-Punkt Untergruppe	 Control circuits for tandem pumps or motors [2010.01]
F16H 61/452	4-Punkt Untergruppe	 Selectively controlling multiple pumps or motors, e.g. switching between series or parallel [2010.01]
F16H 61/456	4-Punkt Untergruppe	 Control of the balance of torque or speed between pumps or motors (hydrostatic differentials F16H 48/18) [2010.01]
F16H 61/46	3-Punkt Untergruppe	. . . Automatic regulation in accordance with output requirements [5, 2006.01, 2010.01]
F16H 61/462	4-Punkt Untergruppe	 for achieving a target speed ratio [2010.01]
F16H 61/465	4-Punkt Untergruppe	 for achieving a target input speed [2010.01]
F16H 61/468	4-Punkt Untergruppe	 for achieving a target input torque [2010.01]
F16H 61/47	4-Punkt Untergruppe	 for achieving a target output speed [2010.01]
F16H 61/472	4-Punkt Untergruppe	 for achieving a target output torque [2010.01]
F16H 61/475	4-Punkt Untergruppe	 for achieving a target power, e.g. input power or output power [2010.01]
F16H 61/478	4-Punkt Untergruppe	 for preventing overload, e.g. high pressure limitation [2010.01]
F16H 61/48	2-Punkt Untergruppe	. . hydrodynamic [5, 2006.01]
F16H 61/50	3-Punkt Untergruppe	. . . controlled by changing the flow, force, or reaction of the liquid in the working circuit, while maintaining a completely filled working circuit [5, 2006.01]

Symbol	Typ	Titel
F16H 61/52	4-Punkt Untergruppe	 by altering the position of blades [5, 2006.01]
F16H 61/54	5-Punkt Untergruppe	 by means of axially-shiftable blade runners [5, 2006.01]
F16H 61/56	5-Punkt Untergruppe	 to change the blade angle [5, 2006.01]
F16H 61/58	4-Punkt Untergruppe	 by change of the mechanical connection of, or between, the runners [5, 2006.01]
F16H 61/60	5-Punkt Untergruppe	 exclusively by the use of freewheel clutches [5, 2006.01]
F16H 61/62	5-Punkt Untergruppe	 involving use of a speed-changing gearing or of a clutch in the connection between runners (F16H 45/02, F16H 61/60 take precedence) [5, 2006.01]
F16H 61/64	3-Punkt Untergruppe	. . . controlled by changing the amount of liquid in the working circuit [5, 2006.01]
F16H 61/66	1-Punkt Untergruppe	. specially adapted for continuously variable gearings (F16H 61/38 takes precedence; orbital toothed gearings with a secondary drive in order to vary the speed continuously F16H 3/72) [2006.01]
F16H 61/662	2-Punkt Untergruppe	. . with endless flexible members [2006.01]
F16H 61/664	2-Punkt Untergruppe	. . Friction gearings [2006.01]
F16H 61/68	1-Punkt Untergruppe	. specially adapted for stepped gearings [2006.01]
F16H 61/682	2-Punkt Untergruppe	. . with interruption of drive [2006.01]
F16H 61/684	2-Punkt Untergruppe	. . without interruption of drive [2006.01]
F16H 61/686	3-Punkt Untergruppe	. . . with orbital gears [2006.01]
F16H 61/688	3-Punkt Untergruppe	. . . with two inputs, e.g. selection of one of two torque-flow paths by clutches [2006.01]
F16H 61/70	1-Punkt Untergruppe	. specially adapted for change-speed gearing in group arrangement, i.e. with separate change-speed gear trains arranged in series, e.g. range or overdrive-type gearing arrangements [2006.01]
F16H 63/00	Hauptgruppe	Control outputs to change-speed- or reversing-gearings for conveying rotary motion [5, 2006.01]
F16H 63/02	1-Punkt Untergruppe	. Final output mechanisms therefor; Actuating means for the final output mechanisms [5, 2006.01]
F16H 63/04	2-Punkt Untergruppe	. . a single final output mechanism being moved by a single final actuating mechanism [5, 2006.01]
F16H 63/06	3-Punkt Untergruppe	. . . the final output mechanism having an indefinite number of positions [5, 2006.01]
F16H 63/08	2-Punkt Untergruppe	. . Multiple final output mechanisms being moved by a single common final actuating mechanism [5, 2006.01]
F16H 63/10	3-Punkt Untergruppe	. . . the final actuating mechanism having a series of independent ways of movement, each way of movement being associated with only one final output mechanism [5, 2006.01]
F16H 63/12	4-Punkt Untergruppe	 two or more ways of movement occurring simultaneously [5, 2006.01]
F16H 63/14	3-Punkt Untergruppe	. . . the final output mechanisms being successively actuated by repeated movement of the final actuating mechanism [5, 2006.01]
F16H 63/16	3-Punkt Untergruppe	. . . the final output mechanisms being successively actuated by progressive movement of the final actuating mechanism [5, 2006.01]
F16H 63/18	4-Punkt Untergruppe	 the final actuating mechanism comprising cams [5, 2006.01]
F16H 63/20	3-Punkt Untergruppe	. . . with preselection and subsequent movement of each final output mechanism by movement of the final actuating mechanism in two different ways, e.g. guided by a shift gate [5, 2006.01]
F16H 63/22	4-Punkt Untergruppe	 the final output mechanisms being simultaneously moved by the final actuating mechanism [5, 2006.01]

Symbol	Typ	Titel
F16H 63/24	2-Punkt Untergruppe	. . each of the final output mechanisms being moved by only one of the various final actuating mechanisms [5, 2006.01]
F16H 63/26	3-Punkt Untergruppe	. . . some of the movements of the final output mechanisms being caused by another final output mechanism [5, 2006.01]
F16H 63/28	2-Punkt Untergruppe	. . two or more final actuating mechanisms moving the same final output mechanism [5, 2006.01]
F16H 63/30	2-Punkt Untergruppe	. . Constructional features of the final output mechanisms [5, 2006.01]
F16H 63/32	3-Punkt Untergruppe	. . . Gear shifter yokes [5, 2006.01]
F16H 63/34	3-Punkt Untergruppe	. . . Locking or disabling mechanisms [5, 2006.01]
F16H 63/36	4-Punkt Untergruppe	 Interlocking devices [5, 2006.01]
F16H 63/38	3-Punkt Untergruppe	. . . Detents [5, 2006.01]
F16H 63/40	1-Punkt Untergruppe	. comprising signals other than signals for actuating the final output mechanisms [5, 2006.01]
F16H 63/42	2-Punkt Untergruppe	. . Ratio indicator devices [5, 2006.01]
F16H 63/44	2-Punkt Untergruppe	. . Signals to the control unit of auxiliary gearing [5, 2006.01]
F16H 63/46	2-Punkt Untergruppe	. . Signals to a clutch outside the gearbox [5, 2006.01]
F16H 63/48	2-Punkt Untergruppe	. . Signals to a parking brake [5, 2006.01]
F16H 63/50	2-Punkt Untergruppe	. . Signals to an engine or motor [7, 2006.01]