

Symbol	Typ	Titel
F	Sektion	MECHANICAL ENGINEERING; LIGHTING; HEATING; WEAPONS; BLASTING
F02	Klasse	COMBUSTION ENGINES; HOT-GAS OR COMBUSTION-PRODUCT ENGINE PLANTS
F02N	Unterkategorie	STARTING OF COMBUSTION ENGINES (starting of free-piston combustion-engines F02B 71/02; starting of gas-turbine plants F02C 7/26); STARTING AIDS FOR SUCH ENGINES, NOT OTHERWISE PROVIDED FOR
		<u>Muscle-operated starting apparatus</u>
F02N 1/00	Hauptgruppe	Starting apparatus having hand cranks (with intermediate power storage F02N 5/00-F02N 15/00) [1, 2006.01]
F02N 1/02	1-Punkt Untergruppe	. having safety means preventing damage caused by reverse rotation [1, 2006.01]
F02N 3/00	Hauptgruppe	Other muscle-operated starting apparatus (with intermediate power storage F02N 5/00-F02N 15/00) [1, 2006.01]
F02N 3/02	1-Punkt Untergruppe	. having pull-cords [1, 2006.01]
F02N 3/04	1-Punkt Untergruppe	. having foot-actuated levers [1, 2006.01]
		<u>Power-operated starting apparatus; Muscle-operated starting apparatus with intermediate power storage</u>
F02N 5/00	Hauptgruppe	Starting apparatus having mechanical power storage [1, 2006.01]
F02N 5/02	1-Punkt Untergruppe	. of spring type [1, 2006.01]
F02N 5/04	1-Punkt Untergruppe	. of inertia type [1, 2006.01]
F02N 7/00	Hauptgruppe	Starting apparatus having fluid-driven auxiliary engines or apparatus [1, 2006.01]
F02N 7/02	1-Punkt Untergruppe	. the apparatus being of single-stroke piston type, e.g. pistons acting on racks or pull-cords [1, 2006.01]
F02N 7/04	2-Punkt Untergruppe	.. the pistons acting on screw-threaded members to effect rotation [1, 2006.01]
F02N 7/06	1-Punkt Untergruppe	. the engines being of reciprocating-piston type (of internal-combustion type F02N 7/10) [1, 2006.01]
F02N 7/08	1-Punkt Untergruppe	. the engines being of rotary type [1, 2006.01]
F02N 7/10	1-Punkt Untergruppe	. characterised by using auxiliary engines or apparatus of combustion type (by using explosive cartridges F02N 13/00) [1, 2006.01]
F02N 7/12	2-Punkt Untergruppe	.. the engines being of rotary type, e.g. turbines (F02N 7/14 takes precedence) [1, 2006.01]
F02N 7/14	2-Punkt Untergruppe	... the starting engines being readily removable from main engines, e.g. of portable type [1, 2006.01]
F02N 9/00	Hauptgruppe	Starting of engines by supplying auxiliary pressure fluid to their working chambers [1, 2006.01]
F02N 9/02	1-Punkt Untergruppe	. the pressure fluid being generated directly by combustion (by using explosive cartridges F02N 13/00) [1, 2006.01]
F02N 9/04	1-Punkt Untergruppe	. the pressure fluid being generated otherwise, e.g. by compressing air [1, 2006.01]
F02N 11/00	Hauptgruppe	Starting of engines by means of electric motors (arrangement or mounting of prime-movers consisting of electric motors and internal combustion engines for mutual or common propulsion B60K 6/20) [1, 2006.01]
F02N 11/02	1-Punkt Untergruppe	. the motors having longitudinally-shiftable rotors [1, 2006.01]
F02N 11/04	1-Punkt Untergruppe	. the motors being associated with current generators [1, 2006.01]
F02N 11/06	2-Punkt Untergruppe	.. and with ignition apparatus [1, 2006.01]
F02N 11/08	1-Punkt Untergruppe	. Circuits specially adapted for starting of engines [1, 2006.01]
F02N 11/10	1-Punkt Untergruppe	. Safety devices (F02N 11/08 takes precedence) [1, 2006.01]

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F02N 11/12	1-Punkt Untergruppe	. Starting of engines by means of mobile, e.g. portable, starting sets [1, 2006.01]
F02N 11/14	1-Punkt Untergruppe	. Starting of engines by means of electric starters with external current supply (F02N 11/12 takes precedence) [1, 2006.01]
F02N 13/00	Hauptgruppe	Starting of engines, or driving of starting apparatus by use of explosives, e.g. stored in cartridges [1, 2006.01]
F02N 13/02	1-Punkt Untergruppe	. Cartridges specially adapted therefor (gas cartridges in general F42B 3/04) [1, 2006.01]
F02N 15/00	Hauptgruppe	Other power-operated starting apparatus; Component parts, details, or accessories, not provided for in, or of interest apart from, groups F02N 5/00-F02N 13/00 [1, 2006.01]
F02N 15/02	1-Punkt Untergruppe	. Gearing between starting-engines and started engines; Engagement or disengagement thereof [1, 2006.01]
F02N 15/04	2-Punkt Untergruppe	... the gearing including disengaging toothed gears [1, 2006.01]
F02N 15/06	3-Punkt Untergruppe	... the toothed gears being moved by axial displacement [1, 2006.01]
F02N 15/08	2-Punkt Untergruppe	... the gearing being of friction type [1, 2006.01]
F02N 15/10	1-Punkt Untergruppe	. Safety devices not otherwise provided for [1, 2006.01]
F02N 19/00	Hauptgruppe	Starting aids for combustion engines, not otherwise provided for [2010.01]
F02N 19/02	1-Punkt Untergruppe	. Aiding engine start by thermal means, e.g. using lighted wicks (using electrically-heated glowing plugs F02P 19/02) [2010.01]
F02N 19/04	2-Punkt Untergruppe	... by heating of fluids used in engines (heating of lubricants F01M 5/02) [2010.01]
F02N 19/06	3-Punkt Untergruppe	... by heating of combustion-air by flame generating means, e.g. flame glow-plugs [2010.01]
F02N 19/08	4-Punkt Untergruppe Arrangement thereof [2010.01]
F02N 19/10	3-Punkt Untergruppe	... by heating of engine coolants [2010.01]
F02N 99/00	Hauptgruppe	Subject matter not provided for in the other groups of this subclass [2010.01]