

**CPC****COOPERATIVE PATENT CLASSIFICATION****F02W****INDEXING SCHEME RELATING TO TURBINES; GAS TURBINES****NOTE**

This subclass constitutes an internal scheme for indexing only, associated with subclasses [F01D](#), [F01K](#), [F02C](#) and [F02K](#), relating to turbines and gas turbines

**F02W 2746/00**

Indexing scheme associated with former IdT class <ref scheme="idt">46F

- [F02W 2746/00006](#) . Turbines; Gas turbines
- [F02W 2746/00013](#) . . Turbines with combustion chamber whose inlet and outlet open and close periodically; Explosion turbines
- [F02W 2746/00019](#) . . Methods for improving the efficiency, special cycles, refrigeration by means of turbines, gas turbine plants with heat pumps ( [R02C 746/00F8](#) takes precedence ), indirect heating by circulation of an auxiliary fluid ( gas turbine plants comprising separators for ashes consisting of matters put in circulation and being used at the same time for heat transfer [R02C 746/00F30N](#) )
- [F02W 2746/00026](#) . . . using combustion gas, gas turbines functioning by means of exhaust gas
- [F02W 2746/00032](#) . . . using magnetohydrodynamic generators
- [F02W 2746/00039](#) . . Turbines with special provisions for the compression of fuel gas or of its components, plants in which the compressor and the turbine form a unit, groups of compression of charge or complement for gas turbine cycles, compression by shock waves ( burners with pulsatory combustion [R02C 746/00F1](#), [R02C 746/00F30N6](#) )
- [F02W 2746/00046](#) . . . Compression in the rotor for the turbine blades, turbines also functioning as compressor, cell compressors ( plants with cellular wheel [R02C 746/00F40A](#) )
- [F02W 2746/00052](#) . . Turbines using a single driven special gas, use of catalysts, use of oxyhydric gas or detonating gas, use of air or liquid oxygen, using of gas generating cartridges, use of compressed air tanks, air turbines, provisions for preventing the formation of snow or frost in the turbine, turbines for hand-held tools
- [F02W 2746/00059](#) . . Turbines using mixtures of gas and steam as driving medium, also if the gas and steam currents only mix after the turbine, water injection
- [F02W 2746/00065](#) . . Turbines using an auxiliary liquid
- [F02W 2746/00072](#) . . . the auxiliary liquid making a to-and-fro movement
- [F02W 2746/00078](#) . . . the auxiliary liquid being circulated in a close circuit
- [F02W 2746/00085](#) . . Turbines using several gases or steams with separate action ( [R02C 746/00F13](#) takes precedence )
- [F02W 2746/00092](#) . . Turbines other than those according to groups [R02C 746/00F1](#) to [R02C 746/00F15](#), counter-rotating turbines
- [F02W 2746/00098](#) . . . Turbines using fluid friction
- [F02W 2746/00105](#) . . . Special kinds of reaction turbines; Turbines with blades having channels passing through the rotor
- [F02W 2746/00111](#) . . . Explosion turbines, i.e. internal combustion
- [F02W 2746/00118](#) . . . Turbines with saw-tooth or ratchet-wheel shaped rotor
- [F02W 2746/00125](#) . . . Propeller and similar turbines driven by reaction, e.g. fluids issuing from the

		rotor
F02W 2746/00131	...	Turbines with radial entry ( gas turbines driven by exhaust gas <u>R02C 746/00F5A</u> )
F02W 2746/00138	..	Cooling
F02W 2746/00144	...	Cooling of gas; Cooling of oil
F02W 2746/00151	..	Components and control; Inversion of rotation; Turbines with forward and reverse rotation
F02W 2746/00157	...	Blades and blade carrying members
F02W 2746/00164	....	Turbine rotors, e.g. multistage; Assembly; Shafts
F02W 2746/00171	...	Safety and control devices; Test benches
F02W 2746/00177	...	Starting devices, e.g. quick-starting devices
F02W 2746/00184	....	using starting cartridges
F02W 2746/0019	...	Elements specifically intended for combustion turbines, pulverulent and solid fuel turbines; Separation of ashes
F02W 2746/00197	....	Fuel supply and feeding devices, e.g. pre-processing of fuel, pumps, valves, draining of the fuel system
F02W 2746/00203	....	Combustion chambers with admission valves, control, scavenging and filling
F02W 2746/0021	..	Plants with specific use of turbines; Construction of power stations with gas turbines
F02W 2746/00217	...	Plants comprising a turbine of a special kind, plants with cellular wheel; Grouping of the various parts of a plant
F02W 2746/00223	...	Turbo-compressor plants for providing compressed air or gases, hot gases or steam, control of these plants
F02W 2746/0023	...	Propulsion plants, e.g. marine turbines
F02W 2746/00236	....	Turbine plants for gas-turbine locomotives
F02W 2746/00243	....	Control of the gas turbines in propulsion plants, e.g. for ships or turbo-propulsion ( control of gas turbines in general <u>R02C 746/00F30</u> , control of fuel supply <u>R02C 746/00F45</u> to <u>R02C 746/00F48</u> )
F02W 2746/0025	....	Gas turbine plants for marine propulsion
F02W 2746/00256	...	Turbines supplied by other gas generators than those consisting in a combination of combustion chambers and axial or centrifugal compressors
F02W 2746/00263	....	Turbines supplied by piston gas generators
F02W 2746/00269	.....	Plants consisting of pistons gas generators, e.g. with free pistons bringing a driving gas to separately assembled turbines, control of such plants
F02W 2746/00276	.....	Plants consisting of a piston gas generator forming a unit with a turbine
F02W 2746/00282	....	Turbines supplied by other gas generators than those according to group <u>R02C 746/00F40D1</u>
F02W 2746/00289	..	Control systems for the fuel supply to the combustors of gas turbines plants ( control of gas turbines in general <u>R02C 746/00F30A</u> , control of gas turbines in propulsion plants except for the jet propulsion <u>R02C 746/00F40C2</u> , fuel supply systems <u>R02C 746/00F30N1</u> )
F02W 2746/00296	...	using a fuel pump with adjustable flow ( <u>R02C 746/00F45C</u> to <u>R02C 746/00F45F</u> take precedence )
F02W 2746/00302	....	with control according to one parameter
F02W 2746/00309	.....	with control according to one or several speeds
F02W 2746/00315	.....	with control according to one or several pressures
F02W 2746/00322	.....	with control according to one or several temperatures

F02W 2746/00328	....	with control according to two parameters
F02W 2746/00335	.....	with control according to one or several speeds and of one or several pressures
F02W 2746/00342	.....	with control according to one or several speeds and of one or several temperatures
F02W 2746/00348	.....	with control according to one or several pressures and of one or several temperatures
F02W 2746/00355	....	with control according to at least three parameters
F02W 2746/00361	.....	with control according to one or several speeds, of one or several pressures and of one or several temperatures
F02W 2746/00368	...	using a fuel pump with adjustable flow and at least one adjustable valve between pump and burners ( <b>R02C 746/00F45F</b> takes precedence )
F02W 2746/00375	....	with control according to one parameter
F02W 2746/00381	.....	with control according to one or several speeds
F02W 2746/00388	.....	with control according to one or several pressures
F02W 2746/00394	.....	with control according to one or several temperatures
F02W 2746/00401	....	with control according to two parameters
F02W 2746/00407	.....	with control according to one or several speeds and of one or several pressures
F02W 2746/00414	.....	with control according to one or several speeds and of one or several temperatures
F02W 2746/00421	.....	with control according to one or several pressures and of one or several temperatures
F02W 2746/00427	....	with control according to at least three parameters
F02W 2746/00434	.....	with control according to one or several speeds, of one or several pressures and of one or several temperatures
F02W 2746/0044	...	using a fuel pump with adjustable flow and at least one adjustable by-pass valve ( <b>R02C 746/00F45F</b> takes precedence )
F02W 2746/00447	....	with control according to one parameter
F02W 2746/00453	.....	with control according to one or several speeds
F02W 2746/0046	.....	with control according to one or several pressures
F02W 2746/00467	.....	with control according to one or several temperatures
F02W 2746/00473	....	with control according to two parameters
F02W 2746/0048	.....	with control according to one or several speeds and of one or several pressures
F02W 2746/00486	.....	with control according to one or several speeds and of one or several temperatures
F02W 2746/00493	.....	with control according to one or several pressures and of one or several temperatures
F02W 2746/005	....	with control according to at least three parameters
F02W 2746/00506	.....	with control according to one or several speeds, of one or several pressures and of one or several temperatures
F02W 2746/00513	...	using a fuel pump with adjustable flow and at least one adjustable valve between pump and burners, and also at least one adjustable by-pass valve
F02W 2746/00519	....	with control according to one parameter
F02W 2746/00526	.....	with control according to one or several speeds
F02W 2746/00532	.....	with control according to one or several pressures

F02W 2746/00539	.....	with control according to one or several temperatures
F02W 2746/00546	.....	with control according to two parameters
F02W 2746/00552	.....	with control according to one or several speeds and of one or several pressures
F02W 2746/00559	.....	with control according to one or several speeds and of one or several temperatures
F02W 2746/00565	.....	with control according to one or several pressures and of one or several temperatures
F02W 2746/00572	.....	with control according to at least three parameters
F02W 2746/00578	.....	with control according to one or several speeds, of one or several pressures and of one or several temperatures
F02W 2746/00585	...	using a fuel pump with non-adjustable flow and at least one adjustable valve between pump and burners ( <a href="#">R02C 746/00F45J</a> takes precedence )
F02W 2746/00592	.....	with control according to one parameter
F02W 2746/00598	.....	with control according to one or several speeds
F02W 2746/00605	.....	with control according to one or several pressures
F02W 2746/00611	.....	with control according to one or several temperatures
F02W 2746/00618	.....	with control according to two parameters
F02W 2746/00625	.....	with control according to one or several speeds and of one or several pressures
F02W 2746/00631	.....	with control according to one or several speeds and of one or several temperatures
F02W 2746/00638	.....	with control according to one or several pressures and of one or several temperatures
F02W 2746/00644	.....	with control according to at least three parameters
F02W 2746/00651	.....	with control according to one or several speeds, of one or several pressures and of one or several temperatures
F02W 2746/00657	...	using a fuel pump with non-adjustable flow and at least one adjustable by-pass valve ( <a href="#">R02C 746/00F45J</a> takes precedence )
F02W 2746/00664	.....	with control according to one parameter
F02W 2746/00671	.....	with control according to one or several speeds
F02W 2746/00677	.....	with control according to one or several pressures
F02W 2746/00684	.....	with control according to one or several temperatures
F02W 2746/0069	.....	with control according to two parameters
F02W 2746/00697	.....	with control according to one or several speeds and of one or several pressures
F02W 2746/00703	.....	with control according to one or several speeds and of one or several temperatures
F02W 2746/0071	.....	with control according to one or several pressures and of one or several temperatures
F02W 2746/00717	.....	with control according to at least three parameters
F02W 2746/00723	.....	with control according to one or several speeds, of one or several pressures and of one or several temperatures
F02W 2746/0073	...	using a fuel pump with non-adjustable flow, at least one adjustable valve between pump and burners, and at least one adjustable by-pass valve
F02W 2746/00736	.....	with control according to one parameter
F02W 2746/00743	.....	with control according to one or several speeds

F02W 2746/0075	.....	with control according to one or several pressures
F02W 2746/00756	.....	with control according to one or several temperatures
F02W 2746/00763	....	with control according to two parameters
F02W 2746/00769	.....	with control according to one or several speeds and of one or several pressures
F02W 2746/00776	.....	with control according to one or several speeds and of one or several temperatures
F02W 2746/00782	.....	with control according to one or several pressures and of one or several temperatures
F02W 2746/00789	....	with control according to at least three parameters
F02W 2746/00796	.....	with control according to one or several speeds, of one or several pressures and of one or several temperatures
F02W 2746/00802	...	Components and parts of control systems according to <b><u>R02C 746/00F45B</u></b> to <b><u>R02C 746/00F45J</u></b>
F02W 2746/00809	....	with control according to one parameter
F02W 2746/00815	.....	with control according to one or several speeds
F02W 2746/00822	.....	with control according to one or several pressures
F02W 2746/00828	.....	with control according to one or several temperatures
F02W 2746/00835	....	with control according to two parameters
F02W 2746/00842	.....	with control according to one or several speeds and of one or several pressures
F02W 2746/00848	.....	with control according to one or several speeds and of one or several temperatures
F02W 2746/00855	.....	with control according to one or several pressures and of one or several temperatures
F02W 2746/00861	....	with control according to at least three parameters
F02W 2746/00868	.....	with control according to one or several speeds, of one or several pressures and of one or several temperatures
F02W 2746/00875	....	Construction of adjustable valves
F02W 2746/00881	..	Control systems for the fuel supply to the main burners as well as to the after-burners of a single gas turbine, or with regulation of another adjustable component of the gas turbine ( <b><u>control systems for the fuel supply only to the main burners or only to the after-burners</u></b> <b><u>R02C 746/00F45</u></b> , <b><u>R02C 746/00F48</u></b> )
F02W 2746/00888	...	of additional fuel injection between the after-burners to ignite them, e.g. "hot-shot", programming devices for the ignition of after-burners
F02W 2746/00894	...	of the fuel supply to the main burners and to the after-burners ( <b><u>R02C 746/00F46G</u></b> takes precedence )
F02W 2746/00901	...	of the fuel supply to the main burners and to the nozzle ( <b><u>R02C 746/00F46G</u></b> takes precedence )
F02W 2746/00907	...	of the fuel supply to the after-burners and to the nozzle ( <b><u>R02C 746/00F46G</u></b> takes precedence )
F02W 2746/00914	...	of the fuel supply to the main burners, to the after-burners and to the nozzle
F02W 2746/00921	...	of the fuel supply to the main burners and of the adjustable stator vanes of the gas turbine
F02W 2746/00927	...	Systems for controlling the fuel supply to the injectors and a variable-pitch propeller driven by the gas turbine
F02W 2746/00934	...	Systems for controlling the fuel supply to the injectors and the by-passing of the driving fluid

- F02W 2746/0094 . . Systems for controlling the fuel supply to the burners of gas turbine plants not foreseen in **R02C 746/00F45** or **R02C 746/00F46**
- F02W 2746/00947 . . . specially adapted to the use of a special fuel or a plurality of fuels
- F02W 2746/00953 . . . using two pumps or more
- F02W 2746/0096 . . . for the combined control of two gas turbine plants or more
- F02W 2746/00967 . . . for dividing the fuel between the main burners or between the after-burners of a single gas turbine ( [division of fuel between main burners and after-burners](#) **R02C 746/00F46** )
- F02W 2746/00973 . . . specially adapted for aircraft gas turbine engines, in which the control is a function of the speed of the aircraft; Mach number control, optimisation of fuel consumption
- F02W 2746/0098 . . . Control systems provided with an additional control system which can take over in case of a breakdown of the normal system, safety devices
- F02W 2746/00986 . . . specially adapted for gas turbine plants with intermittent fuel injection
- F02W 2746/00993 . . . Mechanical control devices linked to the throttle lever