F	Sektion	SECTION F — MECHANICAL ENGINEERING; LIGHTING; HEATING; WEAPONS; BLASTING
F04	Klasse	POSITIVE-DISPLACEMENT MACHINES FOR LIQUIDS; PUMPS FOR LIQUIDS OR ELASTIC FLUIDS (portable fire extinguishers with manually-operated pumps A62C 11/00, with power-driven pumps A62C 25/00; charging or scavenging combustion engines by pumps F02B; engine fuel-injection pumps F02M; ion pumps H01J 41/12; electrodynamic pumps H02K 44/02)
F04F	Unterklasse	PUMPING OF FLUID BY DIRECT CONTACT OF ANOTHER FLUID OR BY USING INERTIA OF FLUID TO BE PUMPED (containers or packages with special means for dispensing liquid or semi-liquid contents by internal gaseous pressure B65D 83/14); SIPHONS [2]
F04F 1/00	Hauptgruppe	Pumps using positively or negatively pressurised fluid medium acting directly on the liquid to be pumped (using only negative pressure F04F 3/00; jet pumps F04F 5/00; siphons F04F 10/00)
F04F 1/02	1-Punkt Untergruppe	. using both positively and negatively pressurised fluid medium, e.g. alternating
F04F 1/04	2-Punkt Untergruppe	generated by vaporising and condensing
F04F 1/06	1-Punkt Untergruppe	. the fluid medium acting on the surface of the liquid to be pumped (F04F 1/02 takes precedence)
F04F 1/08	2-Punkt Untergruppe	specially adapted for raising liquids from great depths, e.g. in wells
F04F 1/10	2-Punkt Untergruppe	of multiple type, e.g. with two or more units in parallel (F04F 1/08 takes precedence)
F04F 1/12	3-Punkt Untergruppe	in series
F04F 1/14	2-Punkt Untergruppe	adapted to pump specific liquids, e.g. corrosive or hot liquids
F04F 1/16	2-Punkt Untergruppe	characterised by the fluid medium being suddenly pressurised, e.g. by explosion
F04F 1/18	1-Punkt Untergruppe	. the fluid medium being mixed with, or generated from, the liquid to be pumped
F04F 1/20	2-Punkt Untergruppe	specially adapted for raising liquids from great depths, e.g. in wells
F04F 3/00	Hauptgruppe	Pumps using negative pressure acting directly on the liquid to be pumped (siphons F04F 10/00)
F04F 5/00	Hauptgruppe	Jet pumps, i.e. devices in which fluid flow is induced by pressure drop caused by velocity of another fluid flow (diffusion pumps F04F 9/00; combination of jet pumps with pumps of other than jet type F04B; use of jet pumps for priming or boosting non-positive-displacement pumps F04D)
F04F 5/02	1-Punkt Untergruppe	. the inducing fluid being liquid
F04F 5/04	2-Punkt Untergruppe	displacing elastic fluids
F04F 5/06	3-Punkt Untergruppe	of rotary type
F04F 5/08	3-Punkt Untergruppe	the elastic fluid being entrained in a free-falling column of liquid
F04F 5/10	2-Punkt Untergruppe	displacing liquids, e.g. containing solids, or liquids and elastic fluids
F04F 5/12	3-Punkt Untergruppe	of multi-stage type
F04F 5/14	1-Punkt Untergruppe	. the inducing fluid being elastic fluid
F04F 5/16	2-Punkt Untergruppe	displacing elastic fluids
F04F 5/18	3-Punkt Untergruppe	for compressing
F04F 5/20	3-Punkt Untergruppe	for evacuating

Symbol	Тур	Titel
F04F 5/22	4-Punkt Untergruppe	of multi-stage type
F04F 5/24	2-Punkt Untergruppe	displacing liquids, e.g. containing solids, or liquids and elastic fluids
F04F 5/26	3-Punkt Untergruppe	of multi-stage type (F04F 5/28 takes precedence)
F04F 5/28	3-Punkt Untergruppe	Restarting of inducing action
F04F 5/30	4-Punkt Untergruppe	with axially-slidable combining nozzle
F04F 5/32	4-Punkt Untergruppe	with hinged flap in combining nozzle
F04F 5/34	2-Punkt Untergruppe	characterised by means for changing inducing-fluid source
F04F 5/36	2-Punkt Untergruppe	characterised by using specific inducing fluid
F04F 5/38	3-Punkt Untergruppe	the inducing fluid being mercury vapour
F04F 5/40	3-Punkt Untergruppe	the inducing fluid being oil vapour
F04F 5/42	1-Punkt Untergruppe	. characterised by the input flow of inducing fluid medium being radial or tangential to output flow (cyclones B04C)
F04F 5/44	1-Punkt Untergruppe	. Component parts, details, or accessories not provided for in, or of interest apart from, groups F04F 5/02-F04F 5/42
F04F 5/46	2-Punkt Untergruppe	Arrangements of nozzles
F04F 5/48	2-Punkt Untergruppe	Control
F04F 5/50	3-Punkt Untergruppe	of compressing pumps
F04F 5/52	3-Punkt Untergruppe	of evacuating pumps
F04F 5/54	1-Punkt Untergruppe	. Installations characterised by use of jet pumps, e.g. combinations of two or more jet pumps of different type
F04F 7/00	Hauptgruppe	Pumps displacing fluids by using inertia thereof, e.g. by generating vibrations therein
F04F 7/02	1-Punkt Untergruppe	. Hydraulic rams
F04F 9/00	Hauptgruppe	Diffusion pumps
F04F 9/02	1-Punkt Untergruppe	. of multi-stage type
F04F 9/04	1-Punkt Untergruppe	. in combination with fore pumps, e.g. use of isolating valves
F04F 9/06	1-Punkt Untergruppe	. Arrangement of vapour traps
F04F 9/08	1-Punkt Untergruppe	. Control
F04F 10/00	Hauptgruppe	Siphons
F04F 10/02	1-Punkt Untergruppe	. Gravity-actuated siphons
F04F 11/00	Hauptgruppe	Other pumps (evacuating by sorption F04B)
F04F 11/02	1-Punkt Untergruppe	. Pressure exchangers [3]