CPC COOPERATIVE PATENT CLASSIFICATION

F MECHANICAL ENGINEERING; LIGHTING; HEATING; WEAPONS; BLASTING (NOTE omitted)

LIGHTING; **HEATING**

F22 STEAM GENERATION

(NOTE omitted)

F22B METHODS OF STEAM GENERATION; STEAM BOILERS (steam engine plants where engine aspects predominate <u>F01K</u>; domestic central-heating systems using steam <u>F24D</u>; heat exchange or heat transfer in general <u>F28</u>; generation of vapour in the cores of nuclear reactors <u>G21</u>)

NOTE

This subclass covers only methods of, or apparatus for, the generation of steam under pressure for heating or power purposes

WARNING

In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the

General aspe	ects of, or methods for, steam generation	1/066	• • • • { with double-wall tubes having a third fluid
1/00	Methods of steam generation characterised by form of heating method (solar heating <u>F24S</u> ; jackets or other cooling means in which steam is generated and which serve for cooling other apparatus, see the subclasses for such apparatus)	1/08	between these walls, e.g. helium for leak detection (heat-exchangers with double-wall tubes F28D 7/10; double-wall pipes per se F16L 9/18)} the heat carrier being steam
1/003	 {using combustion of hydrogen with oxygen (power plants using steam created by combustion of hydrogen with oxygen F01K 25/005)} 	1/10 1/12 1/123	 released from heat accumulators produced by an indirect cyclic process {Steam generators downstream of a nuclear
1/006	• {using solar heat (solar heat collectors <u>per se F24S</u> ; devices for producing mechanical power from solar energy <u>F03G 6/00</u>)}	1/126	boiling water reactor}• • • {Steam generators of the Schmidt-Hartmann type}
1/02	by exploitation of the heat content of hot heat carriers	1/14	• • • coming in direct contact with water in bulk or in sprays
1/021	with heating tubes in which flows a non- specified heating fluid (for nuclear reactors)	1/143 1/146	 {in combination with a nuclear installation} {Loffler boilers}
1/023	 F22B 1/023, for hot gas F22B 1/1884)} • {with heating tubes, for nuclear reactors as far as they are not classified, according to a specified 	1/16 1/162	 the heat carrier being hot liquid or hot vapour, e.g. waste liquid, waste vapour {in combination with a nuclear installation}
1/025	heating fluid, in another group} {with vertical U shaped tubes carried on a	1/165	• • • {using heat pipes (heat pipes per se F28D 15/02)}
1/026	horizontal tube sheet} {with vertical tubes between to horizontal tube	1/167 1/18	 {using an organic fluid} the heat carrier being a hot gas, e.g. waste gas
1/028	sheets} {Steam generation using heat accumulators (F22B 27/14 takes precedence)}		such as exhaust gas of internal-combustion engines (use of waste heat of combustion engines, in general, <u>F02G</u>)
1/04	the heat carrier being hot slag, hot residues, or heated blocks, e.g. iron blocks	1/1807	• • • {using the exhaust gases of combustion engines}
1/06	the heat carrier being molten; Use of molten metal, e.g. zinc, as heat transfer medium	1/1815 1/1823	 {using the exhaust gases of gas-turbines} {for gas-cooled nuclear reactors}
1/063	{for metal cooled nuclear reactors (heat- exchangers having a liquid metal as heat	1/183	• • • {in combination with metallurgical converter installations}
	exchange medium F28D7/00C)}	1/1838	• • • {the hot gas being under a high pressure, e.g. in chemical installations}
		1/1846	• • • • { the hot gas being loaded with particles, e.g. waste heat boilers after a coal gasification

CPC - 2024.05

plant }

	1/1853	• • • {coming in direct contact with water in bulk or in sprays}	5/04	• Component parts thereof; Accessories therefor (covers or similar closure members <u>F16J 13/00</u>)
	1/1861	{Waste heat boilers with supplementary firing}		
	1/1869	• • • {Waste near corters with supprementary filming} • • • {Hot gas water tube boilers not provided for in F22B 1/1807 - F22B 1/1861}	7/00	Steam boilers of furnace-tube type, i.e. the combustion of fuel being performed inside one or
	1/1076			more furnace tubes built-in in the boiler body
	1/1876	• • • { the hot gas being loaded with particles,	7/02	 without auxiliary water tubes
		e.g. dust (with the hot gas being under high	7/04	with auxiliary water tubes
		pressure <u>F22B 1/1846</u>)}		
	1/1884	• • • {Hot gas heating tube boilers with one or more	7/06	inside the furnace tube in transverse arrangements
		heating tubes}	7/08	inside the furnace tube in longitudinal
	1/1892	• • • {Systems therefor not provided for in		arrangement
	1/10/2	F22B 1/1807 - F22B 1/1861}	7/10	• outside the boiler body
	1/20		7/12	• with auxiliary fire tubes; Arrangement of header
	1/20	using heat evolved in a solution absorbing steam;		boxes providing for return diversion of flue gas flow
		Soda steam boilers	7/14	 with both auxiliary water tubes and auxiliary fire
	1/22	 using combustion under pressure substantially 	//14	•
		exceeding atmospheric pressure		tubes
	1/24	. Pressure-fired steam boilers, e.g. using turbo-air	7/16	. Component parts thereof; Accessories therefor, e.g.
		compressors actuated by hot gases from boiler		stay-bolt connections
		furnace	7/18	Walling of flues; Flue gas header boxes
	1/26		7/20	• Furnace tubes
	1/26	• Steam boilers of submerged-flame type, i.e. the	7720	• • I difface tubes
		flame being surrounded by, or impinging on, the	9/00	Steam boilers of fire-tube type, i.e. the flue gas
		water to be vaporised {, e.g. water in sprays}		from a combustion chamber outside the boiler
	1/265	• • { the water being in bulk }		body flowing through tubes built-in in the boiler
	1/28	• in boilers heated electrically {(superheating using an		body
	1,20	electrical heat source independent from heat supply	0.402	-
			9/02	 the boiler body being disposed upright, e.g. above
	1 /001	of the steam boiler <u>F22G 1/165</u>)}		the combustion chamber
	1/281	• • {other than by electrical resistances or electrodes}	9/04	 the fire tubes being in upright arrangement
	1/282	• • {with water or steam circulating in tubes or	9/06	Arrangement of header boxes providing for
		ducts}		return diversion of flue gas flow
	1/284	• • {with water in reservoirs}	9/08	• • the fire tubes being in horizontal arrangement
	1/285	• • • {the water being fed by a pump to the		
	1,203	reservoirs}	9/10	the boiler body being disposed substantially
	1/207	·		horizontally, e.g. at the side of the combustion
	1/287	• • {with water in sprays or in films}		chamber
	1/288	{Instantaneous electrical steam generators built-	9/12	 the fire tubes being in substantially horizontal
		up from heat-exchange elements arranged within		arrangement
		a confined chamber having heat-retaining walls}	9/14	Arrangement of header boxes providing for
	1/30	Electrode boilers	2/2.	return diversion of flue gas flow
	1/303	{ with means for injecting or spraying water	9/16	• the boiler body containing fire tubes disposed
	1,000	against electrodes or with means for water	9/10	•
		circulation}		crosswise in inclined upward arrangement
	1/206	,	9/18	• Component parts thereof; Accessories therefor, e.g.
	1/306	• • • { with at least one electrode permanently		stay-bolt connections
		above the water surface}	44/00	
	2/00	Other methods of steem concretion. Steem heilers	11/00	Steam boilers of combined fire-tube type and
	3/00	Other methods of steam generation; Steam boilers		water-tube type, i.e. steam boilers of fire-tube type
		not provided for in other groups of this subclass		having auxiliary water tubes
	3/02	. involving the use of working media other than water	11/02	 the fire tubes being in upright arrangement
	3/04	 by drop in pressure of high-pressure hot water 	11/04	 the fire tubes being in horizontal arrangement
		within pressure- reducing chambers, e.g. in		
		accumulators (steam accumulators per se	13/00	Steam boilers of fire-box type, i.e. the combustion
		F01K 1/00)		of fuel being performed in a chamber or fire-
	3/045	• • {the drop in pressure being achieved by		box with subsequent flue(s) or fire tube(s), both
	3/043	compressors, e.g. with steam jet pumps}		chamber or fire-box and flues or fire tubes being
	2/06			built-in in the boiler body
	3/06	 by transformation of mechanical, e.g. kinetic, 	13/005	• {with flues, other than fire tubes}
		energy into heat energy		
	3/08	 at critical or supercritical pressure values 	13/02	• mounted in fixed position with the boiler body
				disposed upright
Kind	ds of stea	m boilers	13/023	• • { with auxiliary water tubes inside the fire-
	= 10.0	G		box, e.g. vertical tubes (F22B 13/10 takes
	5/00	Steam boilers of drum type, i.e. without internal		precedence)}
		furnace or fire tubes, the boiler body being	13/026	• • • {the tubes being in substantially horizontal
		contacted externally by flue gas		arrangement}
	5/005	• {with rotating drums}	13/04	• mounted in fixed position with the boiler body
	5/02	• with auxiliary water tubes outside the boiler body	13/04	disposed substantially horizontally
		• • • • • • • • • • • • • • • • • • •	12/07	
			13/06	• Locomobile, traction-engine, steam-roller, or
				locomotive boilers

Kinds of steam boilers F22B

13/065	• • {Combination of low and high pressure	21/085	• • • { the tubes being placed in layers }
	locomotive boilers}	21/086	• • • {Frames built-up from water tubes}
13/08	• without auxiliary water tubes inside the fire-box	21/088	{involving an upper drum and a lower drum
13/10	• with auxiliary water tubes inside the fire-box	21/10	and two lateral drums}
13/12	the auxiliary water tubes lining the fire-box	21/10	the water tubes being arranged in staggered
13/14	• Component parts thereof; Accessories therefor	21/12	rows involving two or more upper drums and two or
13/145	• {Firebox thermosiphons}	21/12	more lower drums, e.g. with crosswise-arranged
13/16	• Stay-bolt connections, e.g. rigid connections		water-tube sets in abutting connections with
13/18	• • • Flexible connections, e.g. of ball-and-socket		drums
	type	21/123	• • {involving crossed water tubes}
15/00	Water-tube boilers of horizontal type, i.e. the	21/126	{involving more than two lower or upper
	water-tube sets being arranged horizontally		drums}
17/00	Water-tube boilers of horizontally-inclined type,	21/14	involving a single upper drum and two or more
	e.g. the water-tube sets being inclined slightly with		lower drums
	respect to the horizontal plane	21/16	the lower drums being interconnected by
17/02	 built-up from water-tube sets in abutting connection 		further water tubes
	with two header boxes in common for all sets, e.g.	21/18	involving two or more upper drums and a single
	with flat header boxes	21/105	lower drum
17/025	• • {with combined inlet and outlet header boxes, e.g.	21/185	• • • (involving more than two upper drums and a
	connected by U-tubes or Field tubes}	21/20	single lower drum}
17/04	the water-tube sets being inclined in opposite	21/20	 involving sectional or subdivided headers in separate arrangement for each water-tube set
15/04	directions, e.g. crosswise	21/22	 built-up from water tubes of form other than straight
17/06	the water-tube sets being bent angularly	21/22	or substantially straight
17/08	• the water-tube sets being curved	21/24	bent in serpentine or sinuous form
17/10	built-up from water-tube sets in abutting connection	21/26	bent helically, i.e. coiled
	with two sectional headers each for every set, i.e. with headers in a number of sections across the	21/28	bent spirally
	width or height of the boiler	21/30	• bent in U-loop form
17/105	• • {with tubes in series flow arrangement}	21/32	disposed horizontally in abutting connection
17/12	the sectional headers being in vertical or	21,32	with upright headers or rising water mains
17/12	substantially vertical arrangement	21/34	 built-up from water tubes grouped in panel form
17/14	the sectional headers being in horizontal or		surrounding the combustion chamber, i.e. radiation
	substantially horizontal arrangement		boilers
17/16	Component parts thereof; Accessories therefor	21/341	{Vertical radiation boilers with combustion in the
17/18	Header boxes; Sectional headers		lower part}
10/00	Water to be below of combined beginning	21/343	{the vertical radiation combustion chamber
19/00	Water-tube boilers of combined horizontally- inclined type and vertical type, i.e. water-		being connected at its upper part to a sidewards
	tube boilers of horizontally-inclined type	21/245	convection chamber}
	having auxiliary water-tube sets in vertical or	21/345	• • • { with a tube bundle between an upper and a
	substantially vertical arrangement	21/346	lower drum in the convection pass} • • {Horizontal radiation boilers}
21/00		21/348	• {Radiation boilers with a burner at the top}
21/00	Water-tube boilers of vertical or steeply-inclined	21/346	 • {Radiation boilers with a burner at the top} • involving an upper drum or headers mounted at
	type, i.e. the water-tube sets being arranged vertically or substantially vertically	21/30	the top of the combustion chamber
21/002	• {involving a single upper drum (F22B 21/36 takes	21/363	{involving a horizontal drum mounted in an
21/002	precedence)}	21/303	upper corner of the boiler}
21/005	• {involving a central vertical drum, header or	21/366	• • • {involving a horizontal drum mounted in the
_1,000	downcomer}		middle of the boiler}
21/007	• {specially adapted for locomotives}	21/38	Component parts thereof, e.g. prefabricated
21/02	 built-up from substantially straight water tubes 		panels
21/04	involving a single upper drum and a single lower	21/40	 built-up from water tubes arranged in a
	drum, e.g. the drums being arranged transversely		comparatively long vertical shaft, i.e. tower boilers
21/06	• • • the water tubes being arranged annularly in	23/00	Water-tube boilers built-up from sets of spaced
	sets, e.g. in abutting connection with drums of	25/00	double-walled water tubes of return type in
	annular shape		unilateral abutting connection with a boiler drum
21/065	• • • • {involving an upper and lower drum of		or with a header box, i.e. built-up from Field water
21/05	annular shape}		tubes comprising an inner tube arranged within an
21/08	the water tubes being arranged sectionally in		outer unilaterally-closed tube
21/001	groups or in banks, e.g. bent over at their ends {involving a combustion chamber, placed at	23/02	• the water-tube, i.e. Field-tube, sets being horizontal
			or substantially horizontal
21/081			
	the side and built-up from water tubes}	23/04	• the water-tube, i.e. Field-tube, sets being vertical or
21/081		23/04	

Kinds of steam boilers F22B

23/06	• Component parts thereof, e.g. Field water tubes (heat-exchange tubes in general <u>F28F</u>)	29/12	• operating with superimposed recirculation during starting and low-load periods, e.g. composite
25/00	Water-tube boilers built-up from sets of water tubes with internally-arranged flue tubes, or fire tubes, extending through the water tubes	31/00	boilers Modifications of boiler construction, or of tube systems, dependent on installation of combustion
27/00	Instantaneous or flash steam boilers		apparatus; Arrangements of dispositions
27/02	 built-up from fire tubes 		of combustion apparatus (steam generation characterised by heating method <u>F22B 1/00</u> ;
27/04	built-up from water tubes		combustion apparatus per se F23)
	(<u>F22B 27/12</u> - <u>F22B 27/16</u> take precedence)	31/0007	• {with combustion in a fluidized bed (fluidized
27/06	• • bent in serpentine or sinuous form	2 2, 0 0 0 1	bed apparatus per se B01J 8/00; fluidized bed
27/08	• bent helically, i.e. coiled		combustors <u>F23C 10/00</u>)}
27/10	• bent spirally	31/0015	• • {for boilers of the water tube type}
27/12	 built-up from rotary heat-exchange elements, e.g. from tube assemblies 	31/0023	• • { with tubes in the bed (<u>F22B 31/003</u> takes precedence)}
27/14	 built-up from heat-exchange elements arranged within a confined chamber having heat-retaining 	31/003	• • • {with tubes surrounding the bed or with water tube wall partitions}
	walls {(<u>F22B 1/288</u> takes precedence)}	31/0038	• • • • { with tubes in the bed}
27/16	• involving spray nozzles for sprinkling or injecting water particles on to or into hot heat-exchange	31/0046	• • {for boilers of the shell type, e.g. with furnace box}
	elements, e.g. into tubes {(<u>F22B 1/287</u> takes	31/0053	• • • { with auxiliary water tubes}
27/165	precedence)}	31/0061	• • {Constructional features of bed cooling}
27/103	• • {with film flow of water on heated surfaces}	31/0069	• • {Systems therefor}
29/00	Steam boilers of forced-flow type	31/0076	• • {Controlling processes for fluidized bed boilers
29/02	• of forced-circulation type {(<u>F22B 29/06</u> takes	24/0004	not related to a particular type}
29/023	precedence)}• {without drums, i.e. without hot water storage in	31/0084	 • { with recirculation of separated solids or with cooling of the bed particles outside the combustion bed }
20/026	the boiler}	31/0092	• • • { with a fluidized heat exchange bed and a
29/026 29/04	 { operating at critical or supercritical pressure } . of combined-circulation type, i.e. in which convection circulation due to the difference in specific gravity between cold and hot water is 	31/00/2	fluidized combustion bed separated by a partition, the bed particles circulating around or through that partition}
	promoted by additional measures, e.g. by injecting pressure-water temporarily	31/02	 Installation of water-tube boilers in chimneys, e.g. in converter chimneys
29/06	• of once-through type, i.e. built-up from tubes receiving water at one end and delivering superheated steam at the other end of the tubes (F22B 33/00 takes precedence)	31/04	 Heat supply by installation of two or more combustion apparatus, e.g. of separate combustion apparatus for the boiler and the superheater respectively
29/061	• • {Construction of tube walls}	31/045	• • {Steam generators specially adapted for burning
29/062	• • · {involving vertically-disposed water tubes}		refuse}
29/064	• • {involving horizontally- or helically-disposed	31/06	Installation of emergency heat supply
	water tubes}	31/08	. Installation of heat-exchange apparatus or of means
29/065	• • • {involving upper vertically disposed water		in boilers for heating air supplied for combustion
	tubes and lower horizontally- or helically	Steam-gener	ation plants; Control systems
****	disposed water tubes}	_	
29/067	 (operating at critical or supercritical pressure (with recirculation during normal operation F22B 29/026)} 	33/00	Steam-generation plants, e.g. comprising steam boilers of different types in mutual association (arrangements or dispositions of steam-generation
29/068	• • {operating with superimposed recirculation		plants in marine vessels <u>B63H 21/00</u>)
	during normal operation (<u>F22B 29/12</u> takes precedence)}	33/02	 Combinations of boilers having a single combustion apparatus in common
29/08	operating with fixed point of final state of complete evaporation {(evaporation or	33/04	• • of boilers of furnace-tube type with boilers of water-tube type
	evaporation apparatus for physical or chemical purposes, e.g. evaporation of liquids for gas phase	33/06	• • of boilers of furnace-tube type with boilers of fire-tube type
29/10	reactions <u>B01B 1/005</u>)} • operating with sliding point of final state	33/08	of boilers of water tube type with boilers of fire-
<i>2)</i> /10	of complete evaporation {(evaporation or	22/10	tube type
	evaporation apparatus for physical or chemical purposes, e.g. evaporation of liquids for gas phase	33/10	 of two or more superposed boilers with separate water volumes and operating with two or more separate water levels
	reactions <u>B01B 1/005</u>)}	33/12	 Self-contained steam boilers, i.e. comprising as a unit the steam boiler, the combustion apparatus, the fuel storage, accessory machines and equipment

33/14	Combinations of low and high pressure boilers	37/002	• {specially adapted for nuclear steam generators, e.g.
33/14	(F22B 13/065 takes precedence)	37/002	maintenance, repairing or inspecting equipment not
33/16	• of forced-flow type		otherwise provided for}
33/18	Combinations of steam boilers with other apparatus	37/003	• • {Maintenance, repairing or inspecting equipment
33/185	• • {in combination with a steam accumulator}		positioned in or via the headers}
35/00	Control systems for steam boilers ({for fluidized	37/005	• • • {Positioning apparatus specially adapted therefor (F22B 37/64 takes precedence)}
	bed boilers <u>F22B 31/0076</u> ;} regulation or control of steam power plants <u>F01K 7/00</u> ; for regulating	37/006	• • {Walking equipment, e.g. walking platforms
	feed-water supply F22D; for controlling superheat		suspended at the tube sheet (walking mechanism per se B62D 57/02)}
	temperature <u>F22G 5/00</u> ; control of combustion <u>F23N</u> ; regulating or controlling in general <u>G05</u>)	37/007	• • {Installation or removal of nuclear steam
35/001	• {Controlling by flue gas dampers (for superheaters	27/000	generators}
	<u>F22G 5/04</u>)}	37/008	• {Adaptations for flue gas purification in steam generators, (flue gas purification in general <u>F23J</u> ;
35/002	• {Control by recirculating flue gases (for superheaters <u>F22G 5/06</u>)}	2= /22	gas purification in general <u>B01D</u>)}
35/004	• {Control systems for steam generators of nuclear	37/02	applicable to more than one kind or type of steam
337001	power plants}	37/025	boiler• {Devices and methods for diminishing corrosion,
35/005	• {Control systems for instantaneous steam boilers}	37/023	e.g. by preventing cooling beneath the dew point}
35/007	• {Control systems for waste heat boilers}	37/04	 and characterised by material, e.g. use of special
35/008	• {Control systems for two or more steam generators	2770.	steel alloy
	$(\underline{F22D} 5/36 \text{ takes precedence})$	37/06	• Flue or fire tubes; Accessories therefor, e.g. fire-
35/02	 for steam boilers with natural convection circulation 		tube inserts
35/04	• during starting-up periods, i.e. during the periods	37/08	Fittings preventing burning-off of the tube
	between the lighting of the furnaces and the		edges
	attainment of the normal operating temperature of the steam boilers	37/10	Water tubes; Accessories therefor (working
35/06	for steam boilers of forced-flow type		of metal tubes <u>B21D</u> ; pipes in general <u>F16L</u> ; repairing leaks in water tubes <u>F16L 55/16</u> ;
35/08	• of forced-circulation type		F28F 11/00; baffles, screens, or deflectors formed
35/083	• • { without drum, i.e. without hot water storage in		of water tubes F23M 9/10; cleaning internal or
	the boiler}		external surfaces of water tubes <u>F28G</u>)
35/086	• • • • {operating at critical or supercritical	37/101	• • • {Tubes having fins or ribs}
	pressure}	37/102	• • • {Walls built-up from finned tubes}
35/10	• of once-through type	37/103	• • • {Internally ribbed tubes}
35/101	• • • {operating with superimposed recirculation	37/104	• • • {Connection of tubes one with the other or with
	during starting or low load periods, e.g. composite boilers (F22B 35/125 takes		collectors, drums or distributors (in general F16L)}
	precedence)}	37/105	• • • {Penetrations of tubes through a wall and their
35/102	• • • { operating with fixed point of final state of	37/103	sealing (in general F16L 5/00)}
	complete evaporation, e.g. in a steam-water	37/106	{Studding of tubes}
	separator}	37/107	• • • {Protection of water tubes (in general
35/104	• • • {Control systems by injecting water (for		F16L 57/00)}
35/105	superheaters <u>F22G 5/12</u>)}• • {operating at sliding pressure}	37/108	• • • {Protection of water tube walls}
35/103	{Operating at stiding pressure} {Control systems with auxiliary heating}	37/12	Forms of water tubes, e.g. of varying cross-
33/107	surfaces}	37/125	section {Bifurcates}
35/108	{Control systems for steam generators having	37/123	Supply mains, e.g. rising mains, down-comers,
	multiple flow paths}	37/14	in connection with water tubes
35/12	• • • operating at critical or supercritical pressure	37/141	• • • { involving vertically-disposed water tubes,
35/125	• • • • {operating with superimposed recirculation		e.g. walls built-up from vertical tubes}
	during starting or low load periods, e.g.	37/142	• • • {involving horizontally-or helically-
35/14	composite boilers} during the starting-up periods, i.e. during the		disposed water tubes, e.g. walls built-up from
33/14	periods between the lighting of the furnaces	27/142	horizontal or helical tubes}
	and the attainment of the normal operating	37/143	• • • {Panel shaped heating surfaces built up from tubes (F22B 37/145 takes precedence)}
	temperature of the steam boilers	37/145	• • • • {Flag-shaped panels built-up from tubes, e.g.
35/16	responsive to the percentage of steam in the	57,145	from U-shaped tubes}
	mixture of steam and water	37/146	{Tube arrangements for ash hoppers and
35/18	Applications of computers to steam boiler control		grates and for combustion chambers of the
37/00	Component parts or details of steam boilers		cyclone or similar type out of the flues}
	(venting devices <u>F16K 24/00</u> ; steam traps or like	37/147	{Tube arrangements for cooling orifices,
	apparatus <u>F16T</u>)	27/1/10	doors and burners}
37/001	• {Steam generators built-up from pre-fabricated	37/148 37/16	 {Tube arrangements for the roofs} Return bends
	elements}	37/10	Return beings

bedok bolier plags for dumor bleaders	37/165	{Closures for access openings in return	37/306	• • • { specially adapted for steam generators of
37/18 is linests, e.g. for receiving deposits from water 37/20 Supporting arrangements, e.g. for securing water-table sets (construction of the walls of furnaces including boiler furnaces F23M 5/08) 37/20 (Suspension and securing arrangements for walls built-up from tubes) 37/20 (Suspension and securing arrangements for contact heating surfaces) 37/20 (Suspension and securing arrangements for contact heating surfaces) 37/20 (Suspension and securing arrangements for contact heating surfaces) 37/20 (Suspension and securing arrangements for contact heating surfaces) 37/20 (Suspension arrangements for walls built-up from tubes) 37/20 (Supporting arrangements for wall) 37/20 (Supporting arrangements for wall) 37/20 (Susporting arrangements for wall) 37/20 (Susporting arrangements for tubes of a tube bandle) 37/20 (Susporting arrangements for drams and collecturs) 37/20 (Susporting arrangements for collecturs) 37/20 (Susporting arrangements for drams sheet need #21D 31/21; pressure expected and susporting arrangements for drams and collecturs) 37/20 (Susporting arrangements for drams and collecturs) 37/21 (Susporting arrangements for drams and collecturs) 37/22 (Susporting arrangements for drams and collecturs) 37/22 (Susporting arrangements for drams and collecturs) 37/22 (Susporting arrangements for drams and collecturs) 37/23 (Susporting arrangements for drams and collecturs) 37/24 (Susporting arrangements for drams and substances are assembled for susporting arrangements for drams and substances are assembled for susporting arrangements for drams and substances are assembled for substances are assembled for a substance are assembled for	37/103		37/300	
57/20 Supporting armagements of the walls of the maching surfaces in cluding surfaces in contact heating surfaces in c			37/32	
supporting arrangements, e.g. for securing water site sets (construction of the walls of furnaces including holier furnaces E23M 5980) 37/201 (Suspension and securing arrangements for walls built-up from tubes) 37/202 (Suspension and securing arrangements for contact hearing surfaces) 37/203 (Hiorizonal tubes supported only away from their ends on vertical support lubes) 37/204 (Supporting arrangements for individual tubes, e.g. for securing tubes to a refractory wall) 37/205 (Supporting arrangements for individual tubes, e.g. for securing tubes to a refractory wall) 37/206 (Supporting arrangements for individual tubes, e.g. for securing tubes to a refractory wall) 37/207 (Supporting arrangements for individual tubes, e.g. for securing tubes to a refractory wall) 37/208 (Supporting arrangements for drums and collecturs) 37/209 (Supporting arrangements for drums and collecturs) 37/209 (Supporting arrangements) 37/200 (Supporting arrangements for drums and collecturs) 37/200 (Supporting arrangements for drums and collecturs) 37/201 (Supporting arrangements) 37/202 (Supporting arrangements) 37/203 (Supporting arrangements) 37/204 (Supporting arrangements) 37/205 (Supporting arrangements) 37/207 (Supporting arrangements) 37/208 (Supporting arrangements) 37/209 (Supporting arrangements) 37/209 (Supporting arrangements) 37/200 (Supporting arrangements) 37/200 (Supporting arrangements) 37/201 (Supporting arrangements) 37/202 (Supporting arrangements) 37/203 (Supporting arrangements) 37/204 (Supporting arrangements) 37/205 (Supporting arrangements) 37/207 (Supporting arrangements) 37/207 (Supporting arrangements) 37/208 (Supporting arrangements) 37/209 (Supporting arrangements) 37/209 (Supporting arrangements) 37/200 (Supporting arrangements) 37/200 (Supporting arrangements) 37/201 (Supporting arrangements) 37/201 (Supporting arrangements) 37/202 (Supporting arrangements) 37/203 (Supporting arrangements) 37/204 (Supporting arrangements) 37/205 (Supporting arrangements) 37/206 (37/18			
waiter tube sets (construction of tube walls of furnaces including holele frunaces 1234 5(8) and include proper plants) 37/201 . [Suspension and securing arrangements for walls built up from tubes) 37/202 . [Suspension and securing arrangements for connuct charing surfaces] 37/203 . [Horizontal tubes supported only away from their ends on vertical support tubes) 37/204 . [Susporing arrangements for individual tubes, e.g. for securing tubes to a freadory wall] 37/205 . [Susporing arrangements for individual tubes, e.g. for securing tubes to a freadory wall] 37/206 . [Susporing and spacing arrangements for tubes of a fub boundle] 37/207 . [Susporing and spacing arrangements for tubes of a fub boundle] 37/208 . [Susporing and spacing arrangements for dubes of a fub boundle] 37/209 . [Susporing arrangements for drawns and collectors] 37/210 . [Susporing arrangements for drums and collectors] 37/22 . [Susporing arrangements for drums and collectors] 37/22 . [Susporing arrangements] 37/22 . [Susporing arrangements] 37/22 . [Nozzle dams introduced through a smaller manaway. e.g. foldable] 37/22 . [Nozzle dams introduced through as smaller manaway. e.g. foldable] 37/22 . [Susporing sin return bends F2B 37/165] 37/22 . [Rozzle dams introduced through a smaller manaway. e.g. foldable] 37/22 . [Rozzle dams introduced through a smaller manaway. e.g. foldable] 37/22 . [Rozzle dams introduced through a smaller manaway. e.g. foldable] 37/23 . [Boller plus, e.g. for handholes (closures for access openings in return bends F2B 37/165] 37/22 . [Rozzle dams introduced through a smaller manaway. e.g. foldable] 37/23 . [Susporing and spacing arrangements of a dams of				
furnaces including bolier furnaces \$23M 508 37/201				, ,
Supporting arrangements for contact heating surfaces			377327	
walls built-up from these) 37/202 (Florizontal dubes supported only away from their ends on vertical support tubes) 37/203 (Supporting arrangements for individual tubes, e.g., for securing tubes to a refractory wall) 37/204 (Supporting and spacing arrangements for tubes of a tube bandle) 37/205 (Supporting and spacing arrangements for tubes of a tube bandle) 37/206 (Anti-vibration supports for the bends of Usubes of a tube bandle) 37/207 (Supporting arrangements for drums and collectors) 37/207 (Supporting arrangements for drums and collectors) 37/208 (Backstay arrangements) 37/209 (Drums; Headers; Accessorise therefor (making bandless from their metal B21D 5124; pressure vessels in general F161 1200; covers or similar close are manylessel for Jackstan introduced through a smaller manylessel for access openings in return bends F22B 37165) 37/222 (Novezie for drums, collectors, manboles or the lack (in general F161 300)) 37/223 (Holder) 37/224 (Horizontal field) 37/225 (Horizontal field) 37/226 (Horizontal field) 37/227 (Horizontal field) 37/228 (Horizontal field) 37/229 (Horizontal field) 37/220 (Horizontal field) 37/221 (Horizontal field) 37/222 (Horizontal field) 37/223 (Horizontal field) 37/224 (Horizontal field) 37/225 (Horizontal field) 37/226 (Horizontal field) 37/227 (Horizontal field) 37/228 (Horizontal field) 37/229 (Horizontal field) 37/230 (Horizontal field) 37/240 (Horizontal field) 37/241 (Horizontal field) 37/242 (Horizontal field) 37/243 (Horizontal field) 37/244 (Horizontal field) 37/245 (Horizontal field) 37/246 (Horizontal field) 37/247 (Horizontal field) 37/248 (Horizontal field) 37/249 (Horizontal field) 37/240 (Horizontal field) 37/241 (Horizontal field) 37/241 (Horizontal field) 37/242 (Horizontal field) 37/243 (Horizontal field) 37/244 (Horizontal field) 37/245 (Horizontal field) 37/246 (Horizontal field) 37/247 (Horizontal field) 37/248 (Horizontal field) 37/249 (Horizontal field) 37/240 (Horizontal field) 37/241 (Horizontal field) 37/2	37/201	{Suspension and securing arrangements for	37/34	
Supporting surfaces Support of only away from their ends on vertical support ubes Supporting and spacing arrangements for individual tubes. e.g. for securing tubes to a refractory wall		walls built-up from tubes}		
37.203	37/202			
The most of the reads on vertical support tubes 37/265 Supporting arrangements for individual tubes, e.g. for securing tubes to a refractory wall		contact heating surfaces}		<u>F22D 7/00</u>)
Supporting arrangements for individual tubes, e.g. for securing tubes to a refractory wall; Supporting and spacing arrangements for tubes of a tube bundle Supporting and spacing arrangements for tubes of a tube bundle Supporting arrangements for tubes of a tube bundle Supporting arrangements for the bends of U-tube steam generators) Supporting arrangements for drums and collectors. Supporting arrangements Supportin	37/203		37/36	 Arrangements for sheathing or casing boilers
tubes, e.g., for securing tubes to a refractory wall) 37.205 . (Supporting and spacing arrangements for nubes of a tube bundle) 37.206 . (Anti-vibration supports for the bends of Utube steam generators) 37.207 . (Supporting arrangements for drums and Cluetors of Supporting arrangements for drums and Cluetors) 37.208 . (Backstay arrangements) 37.209 . (Backstay arrangements) 37.210 . (Drums, Headers, Accessories therefor (making boilers from shee metal Ball Dis 19.4 pressure vessels in general Filed 12.00; eovers or similar closure members Filed 13.000) 37.221 . (Covers for drums, collectors, mamboles or the like (in general Hild 13.000)) 37.222 . (Novzle dams introduced through a smaller manway, e.g. foldable) 37.223 . (Boller plugs, e.g. for handholes (closures for access openings in return bends for access openings of the production of drums against combustion) 37.224 . (Frobetion of drums against combustion) 37.225 . (Protection of drums against combustion) 37.226 . (Protection of drums against combustion) 37.227 . (Drums and collectors for fixing tubes or for connecting collectors to each other) 37.228 . (Frobution supported water-tube steam generators was pended from the top) 37.240 . (for buttom supported water-tube steam generators of the reservoir type, e.g. nuclear steam generators) 37.241 . (for bottom supported water-tube steam generators of the reservoir type, e.g. nuclear steam generators) 37.242 . (for bottom supported water-tube steam generators) 37.243 . (specially adapted for boiler drums) 37.244 . (specially adapted for boiler drums) 37.255 . (Apparatus for washing and purifying steam) 37.266 . (Apparatus for washing and purifying steam) 37.267 . (Valves with water separations) 37.268 . (specially adapted for boiler drums) 37.269 . (specially adapted for steam generator			37/365	
wall) 37/205 (Supporting and spacing mrangements for tubes of a tube bundle) 37/206 (Anti-vibration supports for the bends of U-tube steam generators) 37/207 (Supporting arrangements for drums and collectors) 37/208 (Backstay arrangements for drums and collectors) 37/208 (Backstay arrangements) 37/21 (Covers for drums, collectors, manboles or the like (in general Efoll 1200; overs or similar closure members FI-61 1300) 37/221 (Covers for drums, collectors, manboles or the like (in general FI-61 12100)) 37/222 (Noxzle dams introduced through a smaller manawy, e.g. foldable) 37/223 (Boiler plugs, e.g. for handholes (closures for access openings in return bends 37/225 (Parangements on drums or collectors to each other) 37/226 (Protection of drums against combustion) 37/227 (Drums and collectors for mixing) 37/228 (Protection of drums against combustion) 37/229 (Protection of drums against combustion) 37/240 (For bottom supported water-tube steam generators e.g. heat shielding (frames, engine beds F1-6M) 37/241 (For water-tube steam generators) 37/242 (For steam generators) 37/243 (For water-tube steam generators) 37/244 (For water-tube steam generators) 37/245 (For steam generators) 37/246 (For steam generators) 37/247 (For bottom supported water-tube steam generators) 37/248 (For water-tube steam generators) 37/249 (For steam generators) 37/240 (For steam generators) 37/241 (For water-tube steam generators) 37/242 (For water-tube steam generators) 37/243 (For water-tube steam generators) 37/244 (For water-tube steam generators) 37/245 (For steam generators) 37/25 (For steam generators) 37/26 (For st	37/204			
37/205			37/38	
tubes of a tube bundle) 37/206	25/205	,		
37/206 Anti-vibration supports for the bends of U-tu-tube steam generators U-tu-tube steam generators Silvano Silvan	37/205			
U-tube steam generators 37/207	27/206		25/40	
37/207 [Supporting arrangements for drums and collectors] 37/208 [Backstay arrangements] 37/20	37/200		37/40	
ocliectors 37/228	27/207	· · · · · · · · · · · · · · · · · · ·		
37/22 (Rackstay arrangements) 37/22 Drums; Headers; Accessories therefor (making boilers from sheet metal B21D 51/24; pressure vessels in general F161 12/00; covers or similar closure members F161 3000	37/207		27/42	
37/222 Drums; Headers; Accessories therefor (making boilers from sheet metal B2ID 51/24; pressure vessels in general F161 12/00; covers or similar closure members F161 13/00) 37/21 (Arrangements for detecting leaks) 37/221 (Rozvie dama introduced through a smaller manway, e.g. foldable) 37/222 (Boiler plugs, e.g. for handholes (closures for accessor) 37/245 (Boiler plugs, e.g. for handholes (closures for accessor) 37/245 (Boiler plugs, e.g. for handholes (closures for accessor) 37/245 (Boiler plugs, e.g. for handholes (closures for accessor) 37/245 (Boiler plugs, e.g. for handholes (closures for accessor) 37/245 (Boiler plugs, e.g. for handholes (closures for accessor) 37/245 (Brangements on drums or collectors for fixing tubes or for connecting collectors to each other) 37/245 (Protection of drums against combustion) 37/246 (Protection of drums against combustion) 37/247 (Protection of drums against combustion) 37/248 (Protection supported water-tube steam generator vessels; Accessories therefor) 37/247 (For bottom supported water-tube steam generator vessels; Accessories therefor) 37/247 (For water-tube steam generator suspended from the top) 37/248 (for bottom supported water-tube steam generators of the reservoir type, e.g. unclear steam generators of the reservoir type, e.g. or drying steam, B01D; B04) 37/268 (Specially adapted for steam generators of muclear power plants) 37/285 (Specially adapted for steam generators of muclear power plants) 37/286 (Specially adapted for boiler drums) 37/2	37/208		37/42	
boilers from sheet metal B2ID 51/24; pressure vessels in general F16J 12/00; covers or similar closure members F16J 13/00) 37/221 . (Covers for drums, collectors, manholes or the like (in general F16J 13/00) 37/222 . (Nozzle dams introduced through a smaller manway, e.g. foldable) 37/223 . (Boiler plugs, e.g. for handholes (closures for access openings in return bends F2B 37/165) 37/224 . (Boiler plugs, e.g. for handholes (closures for access openings in return bends F2B 37/165) 37/225 . (Arrangements on drums or collectors for fixing tubes or for connecting collectors to each other) 37/226 . (Protection of drums against combustion) 37/227 . (Drums and collectors for mixing) 37/228 . (Headers for distributing feedwater into steam generators) 37/24 . (for bottom supported water-tube steam generators) 37/24 . (for steam generators of the reservoir type, e.g. nuclear steam generators) 37/26 . (Separator reheaters) 37/26 . (Specially adapted for boiler drums) 37/26 . (Specially adapted for steam generators of nuclear power plants) 37/26 . (Specially adapted for steam generators of nuclear power plants) 37/28 . (vivalves with water separators) 37/28 . (specially adapted for steam generators of nuclear power plants) 37/28 . (specially adapted for steam generators of nuclear power plants) 37/28 . (specially adapted for steam generators of nuclear power plants) 37/28 . (specially adapted for steam generators of nuclear power plants) 37/29 . (specially adapted for steam generators of nuclear power plants) 37/29 . (specially adapted for steam generators of nuclear power plants) 37/20 . (specially adapted for steam generators of nuclear power plants) 37/20 . (specially adapted for steam generators of nuclear power plants) 37/20 . (specially adapted for steam generators of nuclear power plants) 37/20 . (specially adapted for steam generators of nuclear power plants) 37/2				
vessels in general FI6J 12/00; covers or similar closure members F16J 13/00) 37/221	31122			
closure members F16J 13:00) 37/221 (Covers for drums, collectors, manholes or the like (in general F16J 13:00)) 37/222 (Nozzle dams introduced through a smaller manway, e.g. foldable) 37/223 (Nozzle dams introduced through a smaller manway, e.g. foldable) 37/224 (Nozzle dams introduced through a smaller manway, e.g. foldable) 37/225 (Boiler plugs, e.g. for handholes (closures for access openings in return bends F22B 37/165)) 37/225 (Arrangements on drums or collectors for fixing tubes or for connecting collectors to each other) 37/226 (Protection of drums against combustion) 37/227 (Drums and collectors for mixing) 37/228 (Headers for distributing feedwater into steam generator vessels; Accessories therefor) 37/24 (Supporting, suspending, or setting arrangements, e.g. heat shielding (frames, engine beds F16M) 37/242 (for bottom supported water-tube steam generators) 37/243 (for steam generators of the reservoir type, e.g. nuclear steam generators) 37/248 (with a vertical cylindrical wall) 37/260 (Separator steam) 37/261 (Sepcially adapted for boiler drums) 37/263 (Apparatus for washing and purifying steam) 37/266 (Separator reheaters) 37/268 (specially adapted for steam generators of nuclear power plants) 37/280 (specially adapted for steam generators of nuclear power plants) 37/281 (specially adapted for steam generators of nuclear power plants) 37/282 (specially adapted for steam generators of nuclear power plants) 37/283 (specially adapted for steam generators of nuclear power plants) 37/283 (specially adapted for steam generators of nuclear power plants) 37/284 (specially adapted for steam generators of nuclear power plants) 37/285 (specially adapted for steam generators of nuclear power plants) 37/286 (specially adapted for steam generators of nuclear power plants) 37/286 (specially adapted for steam generators of nuclear power plants) 37/286 (specially adapted for steam generators of nuclear power plants) 37/280 (specially adapted for steam generators of nuclear power plants) 37/280 (specially adapted for				
Covers for drums, collectors, manholes or the like (in general F16L1300) 37/425 Freed-water supply alarm devices using floats)			37/421	
like (in general F16J 13:00) 37/222 . (Nozzle dams introduced through a smaller manway, e.g. foldable) 37/223 . (Boiler plugs, e.g. for handholes (closures for access openings in return bends F22B 37/165)) 37/224 . (Boiler plugs, e.g. for handholes (closures for access openings in return bends F22B 37/165)) 37/225 . (Arrangements on drums or collectors for fixing tubes or for connecting collectors to each other) 37/226 . (Protection of drums against combustion) 37/227 . (Drums and collectors for mixing) 37/228 . (Headers for distributing feedwater into steam generator vessels; Accessories therefor) 37/24 . (If or bottom supported water-tube steam generators) 37/24 . (If or water-tube steam generators) 37/25 . (Safety devices with fusible plugs) 37/26 . (If or water-tube steam generators) 37/27 . (If or water-tube steam generators) 37/28 . (If or water-tube steam generators) 37/29 . (If or water-tube steam generators) 37/29 . (If or water-tube steam generators) 37/29 . (If or water-tube steam generators) 37/20 . (If or water	37/221			
37/222 [Nozzle dams introduced through a smaller manway, e.g. foldable] 37/223 [Boiler plugs, e.g. for handholes (closures for access openings in return bends F2B 37/165)] 37/224 [Roiler plugs, e.g. for handholes (closures for access openings in return bends F2B 37/165)] 37/225 [Arrangements on drums or collectors for fixing tubes or for connecting collectors to each other) 37/226 . [Protection of drums against combustion] 37/227 . [Drums and collectors for mixing] 37/228 [Headers for distributing feedwater into steam generator vessels; Accessories therefor] 37/24 . Supporting, suspending, or setting arrangements, e.g. heat shielding (frames, engine beds E16M) 37/24 [for bottom supported water-tube steam generators] 37/24 [for water-tube steam generators of from the top] 37/24 [for steam generators of the reservoir type, e.g. nuclear steam generators] 37/24 [for steam generators] 37/24 [state of the vertical plant of the top] 37/25 [state of the vertical plant of the steam generators] 37/26 . Steam-separating arrangements (vapour-liquid separators, e.g. for drying steam, B01D; B04) 37/26 . [specially adapted for boiler drums] 37/26 . [specially adapted for steam generators of nuclear power plants] 37/26 . [specially adapted for steam generators of nuclear power plants] 37/28 [specially adapted for steam generators of nuclear power plants] 37/28 [specially adapted for boiler drums] 37/28 [specially adapted for boiler drums] 37/28 [specially adapted for steam generators of nuclear power plants] 37/28 [specially adapted for steam generators of nuclear power plants] 37/28 [specially adapted for steam generators of nuclear power plants] 37/28 [specially adapted for steam generators of nuclear power plants] 37/28 [specially adapted for steam generators of nuclear power plants] 37/29 [specially adapted for steam generators of nuclear power plants] 37/29 [specially adapted for steam generators of nuclear power plants] 37/29 [special				
manway, e.g. foldable) 37/223 (Boiler plugs, e.g. for handholes (closures for access openings in return bends for access openings in return bends F22B 37/165) 37/225 {Arrangements on drums or collectors for fixing tubes or for connecting collectors to each other) 37/226 {Protection of drums against combustion} 37/227 (Drums and collectors for mixing) 37/228 (Headers for distributing feedwater into steam generator vessels; Accessories therefor) 37/24 Supporting, suspending, or setting arrangements, e.g. heat shielding (frames, engine beds F16M) 37/242 {for bottom supported water-tube steam generators} 37/244 {for water-tube steam generators of from the top} 37/246 {for steam generators of the reservoir type, e.g. nuclear steam generators, e.g. for drying steam, B01D, B04) 37/26 . Steam-separating arrangements (vapour-liquid separators, e.g. for drying steam, B01D, B04) 37/263 . (Valves with water separators) 37/266 . (Separator reheaters) 37/267 . (Separator reheaters) 37/268 . (specially adapted for boiler drums) 37/268 . (specially adapted for steam generators of nuclear power plants) 37/280 . (specially adapted for steam generators of nuclear power plants) 37/280 . (specially adapted for steam generators of nuclear power plants) 37/280 . (specially adapted for steam generators of nuclear power plants) 37/30 . using impingement against baffle separators	37/222		37/426	****
for access openings in return bends F22B 37/165) 37/44 of safety valves (safety valves ger se F16K) 37/25 {Arrangements on drums or collectors for fixing tubes or for connecting collectors to each other) 37/26 {Protection of drums against combustion} 37/27 {Drums and collectors for mixing} 37/28 {Headers for distributing feedwater into steam generator vessels; Accessories therefor} 37/28 Supporting, suspending, or setting arrangements, e.g. heat shielding (frames, engine beds F16M) 37/24 {for bottom supported water-tube steam generators} 37/24 {for water-tube steam generators suspended from the top} 37/24 {for water-tube steam generators of the reservoir type, e.g. nuclear steam generators} 37/24 {with a vertical cylindrical wall} 37/26 . Steam-separating arrangements (vapour-liquid separators, e.g. for drying steam, BollD: B04) 37/261 {specially adapted for boiler drums} 37/262 {Suparator reheaters} 37/263 {Valves with water separators} 37/266 {Separator reheaters} 37/267 {Specially adapted for steam generators of nuclear power plants} 37/28 involving reversal of direction of flow 37/28 {specially adapted for boiler drums} 37/28 {specially adapted for steam generators of nuclear power plants} 37/28 {specially adapted for boiler drums} 37/28 {specially adapted for bo		manway, e.g. foldable}		* * * * * * * * * * * * * * * * * * * *
F22B 37/165) 37/44	37/223	• • • • {Boiler plugs, e.g. for handholes (closures	37/428	{Feed-water supply alarm devices using
Safety devices extinguishing the fire fixing tubes or for connecting collectors to each other 37/446		for access openings in return bends		dilatation of solids or liquids}
fixing tubes or for connecting collectors to each other) 37/426			37/44	• • of safety valves (safety valves <u>per se</u> <u>F16K</u>)
other} 37/226 . (Protection of drums against combustion} 37/227 . (Drums and collectors for mixing} 37/227 . (Drums and collectors for mixing} 37/228 . (Headers for distributing feedwater into steam generator vessels; Accessories therefor} 37/24 . Supporting, suspending, or setting arrangements, e.g. heat shielding (frames, engine beds F16M) 37/242 . (for bottom supported water-tube steam generators} 37/244 . (for water-tube steam generators suspended from the top} 37/245 . (for steam generators of the reservoir type, e.g. nuclear steam generators) 37/246 . (for steam generators) 37/247 . (specially adapted for boiler drums) 37/261 . (specially adapted for boiler drums) 37/265 . (Apparatus for washing and purifying steam) 37/266 . (Separator reheaters) 37/268 . (specially adapted for boiler drums) 37/280 . (specially adapted for steam generators of nuclear power plants) 37/280 . (specially adapted for steam generators of nuclear power plants) 37/280 . (specially adapted for steam generators of nuclear power plants) 37/280 . (specially adapted for steam generators of nuclear power plants) 37/280 . (specially adapted for steam generators of nuclear power plants) 37/280 . (specially adapted for steam generators of nuclear power plants) 37/280 . (specially adapted for steam generators of nuclear power plants) 37/280 . (specially adapted for steam generators of nuclear power plants) 37/280 . (specially adapted for steam generators of nuclear power plants) 37/280 . (specially adapted for steam generators of nuclear power plants) 37/280 . (specially adapted for steam generators of nuclear power plants) 37/280 . (specially adapted for steam generators of nuclear power plants) 37/280 . (specially adapted for steam generators of nuclear power plants) 37/280 . (specially adapted for steam generators of nuclear power plants) 37/280 . (specially adapted for steam generators of nuclear power plants) 37/280 . (specially adapted for steam generators of nuclear power plants) 37/280 . (specially adapted for steam generators of	37/225	· · ·	37/443	• • • {Safety devices extinguishing the fire}
37/226 {Protection of drums against combustion} 37/227 {Drums and collectors for mixing} 37/228 {Headers for distributing feedwater into steam generator vessels; Accessories therefor} 37/24 Supporting, suspending, or setting arrangements, e.g. heat shielding (frames, engine beds F16M) 37/242 {for bottom supported water-tube steam generators} 37/244 {for water-tube steam generators suspended from the top} 37/245 {for steam generators of the reservoir type, e.g. nuclear steam generators} 37/246 {for steam generators of the reservoir type, e.g. nuclear steam generators} 37/247 {with a vertical cylindrical wall} 37/26 {steam-separating arrangements (vapour-liquid separators, e.g. for drying steam, B01D; B04) 37/261 {specially adapted for boiler drums} 37/262 {Specially adapted for steam generators of nuclear power plants} 37/28 {specially adapted of roted for follow funclear power plants} 37/28 {specially adapted of roted for follow funclear power plants} 37/28 {specially adapted of roted for follow funclear power plants} 37/28 {specially adapted for steam generators of nuclear power plants} 37/28 {specially adapted of roted for follow funclear power plants} 37/28 {specially adapted for steam generators of nuclear power plants} 37/28 {specially adapted for for steam generators of nuclear power plants} 37/28 {specially adapted for steam generators of nuclear power plants} 37/28 {specially adapted for steam generators of nuclear power plants} 37/28 {specially adapted for steam generators of nuclear power plants} 37/28 {specially adapted for steam generators of nuclear power plants} 37/28 {specially adapted for steam generators of nuclear power plants} 37/28 {specially adapted for steam generators of nuclear power plants} 37/29 {specially adapted for steam generators of nuclear power plants} 37/29 {specially adapted for steam generators of nuclear power plants} 37/20			37/446	• • • {Safety devices responsive to overpressure}
37/227 {Drums and collectors for mixing} 37/228 {Headers for distributing feedwater into steam generator vessels; Accessories therefor} 37/24 . Supporting, suspending, or setting arrangements, e.g. heat shielding (frames, engine beds F16M) 37/242 {for bottom supported water-tube steam generators} 37/244 {for water-tube steam generators suspended from the top} 37/244 {for water-tube steam generators suspended from the top} 37/245 {for steam generators of the reservoir type, e.g. nuclear steam generators} 37/246 {for steam generators of the reservoir type, e.g. nuclear steam generators} 37/26 Steam-separating arrangements (vapour-liquid separators, e.g. for drying steam, Bol1D; Bo4) 37/261 {specially adapted for boiler drums} 37/263 . {Valves with water separators} 37/265 {Apparatus for washing and purifying steam} 37/266 {specially adapted for steam generators of nuclear power plants} 37/28 {specially adapted for boiler drums} 37/28 {specially adapted for footeen drums} 37/28 {specially adapted for steam generators of nuclear power plants} 37/28 {specially adapted for footeen drums} 37/28 {specially adapted for footeen drums} 37/28 {specially adapted for steam generators of nuclear power plants} 37/28 {specially adapted for steam generators of nuclear power plants} 37/28 {specially adapted for steam generators of nuclear power plants} 37/28 {specially adapted for steam generators of nuclear power plants} 37/28 {specially adapted for steam generators of nuclear power plants} 37/28 {specially adapted for steam generators of nuclear power plants} 37/28 {specially adapted for steam generators of nuclear power plants} 37/28 {specially adapted for steam generators of nuclear power plants} 37/28 {specially adapted for steam generators of nuclear power plants} 37/28 {specially adapted for steam generators of nuclear power plants} 37/29 {specially adapted for steam generators of nucl	2=/22=		37/46	responsive to low or high water level, e.g.
37/228 {Headers for distributing feedwater into steam generator vessels; Accessories therefor} 37/24 . Supporting, suspending, or setting arrangements, e.g. heat shielding (frames, engine beds F16M) 37/242 {for bottom supported water-tube steam generators} 37/244 {for water-tube steam generators suspended from the top} 37/245 {for steam generators of the reservoir type, e.g. nuclear steam generators of the reservoir type, e.g. nuclear steam generators of the reservoir type, e.g. nuclear steam generators (vapour-liquid separators, e.g. for drying steam, B01D; B04) 37/261 {specially adapted for boiler drums} 37/263 . {Valves with water separators} 37/264 . {Seperator reheaters} 37/265 . {Separator reheaters} 37/266 . {Seperator reheaters} 37/268 . involving reversal of direction of flow 37/283 {specially adapted for steam generators of nuclear power plants} 37/280 (specially adapted for steam generators of nuclear power plants} 37/30 using impingement against baffle separators 37/30 . using impingement against baffle separators				
generator vessels; Accessories therefor} 37/24 . Supporting, suspending, or setting arrangements, e.g. heat shielding (frames, engine beds F16M) 37/242 . {for bottom supported water-tube steam generators} 37/244 {for water-tube steam generators suspended from the top} 37/246 {for water-tube steam generators suspended from the top} 37/246 {for steam generators of the reservoir type, e.g. nuclear steam generators} 37/246 {with a vertical cylindrical wall} 37/26 Steam-separating arrangements (vapour-liquid separators, e.g. for drying steam, B01D; B04) 37/261 {specially adapted for boiler drums} 37/263 {Valves with water separators} 37/265 . {Apparatus for washing and purifying steam} 37/266 {Seperator reheaters} 37/268 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/281 {specially adapted for steam generators of nuclear power plants} 37/281 {specially adapted for steam generators of nuclear power plants} 37/281 {specially adapted for steam generators of nuclear power plants} 37/281 {specially adapted for steam generators of nuclear power plants} 37/282 {specially adapted for steam generators o				
37/24 . Supporting, suspending, or setting arrangements, e.g. heat shielding (frames, engine beds F16M) 37/242 . {for bottom supported water-tube steam generators} 37/244 . {for water-tube steam generators suspended from the top} 37/245 . {for water-tube steam generators suspended from the top} 37/246 . {for steam generators of the reservoir type, e.g. nuclear steam generators of the reservoir type, e.g. nuclear steam generators} 37/248 . {with a vertical cylindrical wall} 37/26 . Steam-separating arrangements (vapour-liquid separators, e.g. for drying steam, B01D; B04) 37/261 . {specially adapted for boiler drums} 37/263 . {Valves with water separators} 37/265 . {Apparatus for washing and purifying steam} 37/266 . {Separator reheaters} 37/268 . {specially adapted for steam generators of nuclear power plants} 37/28 . involving reversal of direction of flow 37/280 . {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/281 {specially adapted for steam generators of nuclear power plants} 37/281 {specially adapted for steam generators of nuclear power plants} 37/281 {specially adapted for steam generators of nuclear power plants} 37/281 {specially adapted for steam generators of nuclear power plants} 37/282	37/228			
e.g. heat shielding (frames, engine beds F16M) 37/242 . {for bottom supported water-tube steam generators} 37/244 {for water-tube steam generators suspended from the top} 37/246 {for steam generators of the reservoir type, e.g. nuclear steam generators} 37/246 {with a vertical cylindrical wall} 37/26 . Steam-separating arrangements (vapour-liquid separators, e.g. for drying steam, B01D; B04) 37/261 . {specially adapted for boiler drums} 37/263 . {Valves with water separators} 37/264 . {specially adapted for steam generators of nuclear power plants} 37/265 . {specially adapted for steam generators of nuclear power plants} 37/28 involving reversal of direction of flow nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 using impingement against baffle separators 37/30 using impingement against baffle separators 37/30 using impingement against baffle separators 37/245 {safety devices with fusible plugs} 37/48 {safety devices with fusible plugs} solutions steam generator surfaces of water tubes F23B); Combinations thereof with boilers (cleaning external surfaces of tubes by soot blowers F23D); Combinations thereof with boilers 37/483 {specially adapted for nuclear steam generators} 37/483 {specially adapted for boiler drums} 37/50 {Steam-separators, e.g. for drying steam, B01D; B04} 37/50 {pecially adapted for steam generators of nuclear power plants} 37/50 {pecially adapted for steam generators of nuclear power plants} 37/54 De-sludging or blow-down devices (F22B 37/565 takes precedence)} 37/54 {valves specially adapted therefor (valves in general F16K)} 37/56 {pecially adapted for steam generators of nuclear power plants} 37/50 {pecially adapted for steam generators	27/24		37/47	
37/242 {for bottom supported water-tube steam generators} 37/244 {for water-tube steam generators suspended from the top} 37/245 {for water-tube steam generators suspended from the top} 37/246 {for steam generators of the reservoir type, e.g. nuclear steam generators} 37/248 {with a vertical cylindrical wall} 37/248 {with a vertical cylindrical wall} 37/26 . Steam-separating arrangements (vapour-liquid separators, e.g. for drying steam, B01D; B04) 37/261 {specially adapted for boiler drums} 37/263 {Valves with water separators} 37/265 {Apparatus for washing and purifying steam} 37/266 {Separator reheaters} 37/268 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for boiler drums} 37/281 {specially adapted for steam generators of nuclear power plants} 37/282 {specially adapted for steam generators of nuclear power plants} 37/283 {specially adapted for steam generators of nuclear power plants} 37/284 {specially adapted for steam generators of nuclear power plants} 37/285 {specially adapted for steam generators of nuclear power plants} 37/286 {specially adapted for steam generators of nuclear power plants} 37/286 {specially adapted for steam generators of nuclear power plants} 37/286 {specially adapted for steam generators of nuclear power plants} 37/286 {specially adapted for steam generators of nuclear power plants} 37/287 {valves specially adapted therefor (valves in general F16K)} 37/287 {specially adapted for steam generators of nuclear power plants} 37/288 {specially adapted for steam generators of nuclear power plants} 37/289 {specially adapted for steam generators of nuclear power plants} 37/290 {specially adapted for steam generators of nuclear power plants} 37/290 {specially adapted for steam generators of nuclear power plants}	31/24			
37/244 {for water-tube steam generators suspended from the top} 37/246 {for water-tube steam generators suspended from the top} 37/246 {for steam generators of the reservoir type, e.g. nuclear steam generators} 37/248 {with a vertical cylindrical wall} 37/26 Steam-separating arrangements (vapour-liquid separators, e.g. for drying steam, B01D; B04) 37/261 {specially adapted for boiler drums} 37/263 {Valves with water separators} 37/265 {Apparatus for washing and purifying steam} 37/266 {Separator reheaters} 37/268 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for boiler drums} 37/281 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for boiler drums} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for stea	27/242		27/475	
37/244 {for water-tube steam generators suspended from the top} 37/246 {for steam generators of the reservoir type, e.g. nuclear steam generators} 37/248 {with a vertical cylindrical wall} 37/26 Steam-separating arrangements (vapour-liquid separators, e.g. for drying steam, B01D; B04) 37/261 {specially adapted for boiler drums} 37/263 {Valves with water separators} 37/264 {Specially adapted for boiler drums} 37/265 {Apparatus for washing and purifying steam} 37/266 {Separator reheaters} 37/268 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for boiler drums} 37/280 {specially adapted for boiler drums} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for boiler drums} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for boiler drums} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted	31/242	* **		
from the top} 37/246 {for steam generators of the reservoir type, e.g. nuclear steam generators} 37/248 {with a vertical cylindrical wall} 37/26 Steam-separating arrangements (vapour-liquid separators, e.g. for drying steam, B01D; B04) 37/261 {specially adapted for boiler drums} 37/263 {Valves with water separators} 37/265 {Apparatus for washing and purifying steam} 37/266 {Sepecially adapted for steam generators of nuclear power plants} 37/288 {specially adapted for boiler drums} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280	37/244		37/48	
37/246 {for steam generators of the reservoir type, e.g. nuclear steam generators} 37/248 {with a vertical cylindrical wall} 37/26 Steam-separating arrangements (vapour-liquid separators, e.g. for drying steam, B01D; B04) 37/261 {specially adapted for boiler drums} 37/263 {Valves with water separators} 37/265 {Apparatus for washing and purifying steam} 37/266 {Seperator reheaters} 37/268 {specially adapted for steam generators of nuclear power plants} 37/28 involving reversal of direction of flow 37/283 {specially adapted for steam generators of nuclear power plants} 37/286 {specially adapted for steam generators of nuclear power plants} 37/30 using impingement against baffle separators	31/2-1-1			
nuclear steam generators} 37/248 {with a vertical cylindrical wall} 37/26 . Steam-separating arrangements (vapour-liquid separators, e.g. for drying steam, B01D; B04) 37/261 {specially adapted for boiler drums} 37/263 {Valves with water separators} 37/265 {Apparatus for washing and purifying steam} 37/266 {Sepecially adapted for steam generators of nuclear power plants} 37/28 involving reversal of direction of flow 37/283 {specially adapted for steam generators of nuclear power plants} 37/286 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/290 using impingement against baffle separators	37/246	e :		
37/248 {with a vertical cylindrical wall}thereof with boilers37/26 Steam-separating arrangements (vapour-liquid separators, e.g. for drying steam, B01D; B04)37/483 {specially adapted for nuclear steam generators}37/261 {specially adapted for boiler drums}37/486 {Devices for removing water, salt, or sludge from boilers (F22B 37/483, F22B 37/50, F22B 37/52 and F22B 37/54 take precedence)}37/265 {Specially adapted for steam generators of nuclear power plants}37/50				
37/26 Steam-separating arrangements (vapour-liquid separators, e.g. for drying steam, B01D; B04) 37/261 { specially adapted for boiler drums} 37/486 { Devices for removing water, salt, or sludge from boilers (F22B 37/483, F22B 37/50, F22B 37/52 and F22B 37/54 take precedence)} 37/265 { Apparatus for washing and purifying steam} 37/266 { Separator reheaters} 37/268 { specially adapted for steam generators of nuclear power plants} 37/28 involving reversal of direction of flow 37/283 { specially adapted for steam generators of nuclear power plants} 37/36 { specially adapted for steam generators of nuclear power plants} 37/30 using impingement against baffle separators	37/248			
separators, e.g. for drying steam, B01D; B04) 37/261 { specially adapted for boiler drums} 37/263 { Valves with water separators} from boilers (F22B 37/483, F22B 37/50, F22B 37/52 and F22B 37/54 take precedence)} 37/265 { Apparatus for washing and purifying steam} 37/266 { Separator reheaters} 37/268 { specially adapted for steam generators of nuclear power plants} 37/54 Separator of low 37/283 { specially adapted for boiler drums} 37/286 { specially adapted for boiler drums} 37/286 { specially adapted for steam generators of nuclear power plants} 37/54 { Separator of low adapted for boiler drums} 37/54 { Separator devices { (F22B 37/565 takes precedence)} 37/54 { Valves specially adapted therefor (valves in general F16K)} 37/56 { Separator of low adapted for steam generators of nuclear power plants} { Separator of low adapted for steam generators of nuclear power plants} { Separator of low adapted for steam generators of nuclear power plants} { Separator of low adapted for steam generators of nuclear power plants} { Separator of low adapted for steam generators of nuclear power plants} { Separator of low adapted for steam generators of nuclear power plants} { Separator of low adapted for steam generators of nuclear power plants}	37/26	The state of the s	37/483	{specially adapted for nuclear steam
37/263 {Valves with water separators} 37/265 {Apparatus for washing and purifying steam} 37/266 {Separator reheaters} 37/268 {Separator reheaters} 37/268 {specially adapted for steam generators of nuclear power plants} 37/28 involving reversal of direction of flow 37/283 {specially adapted for boiler drums} 37/286 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/30 using impingement against baffle separators from boilers (F22B 37/54, F22B 37/50, F22B 37/54 take precedence)} 37/50 Washing-out devices {(F22B 37/565 takes precedence)} 37/54 {Valves specially adapted therefor (valves in general F16K)} 37/56 & Boiler cleaning control devices, e.g. for ascertaining proper duration of boiler blow-down				generators}
37/265 {Apparatus for washing and purifying steam} 37/266 {Separator reheaters} 37/268 {Separator reheaters} 37/28 {specially adapted for steam generators of nuclear power plants} 37/28 involving reversal of direction of flow 37/283 {specially adapted for boiler drums} 37/286 {specially adapted for boiler drums} 37/287 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for steam generators of nuclear power plants} 37/30 using impingement against baffle separators	37/261	• • { specially adapted for boiler drums }	37/486	{Devices for removing water, salt, or sludge
37/265 {Apparatus for washing and purifying steam} 37/266 {Separator reheaters} 37/268 {specially adapted for steam generators of nuclear power plants} 37/28 involving reversal of direction of flow 37/283 {specially adapted for boiler drums} 37/286 {specially adapted for steam generators of nuclear power plants} 37/280 {specially adapted for boiler drums} 37/280 {specially adapted for steam generators of nuclear power plants} 37/30 using impingement against baffle separators	37/263			
37/268 {specially adapted for steam generators of nuclear power plants} 37/54 De-sludging or blow-down devices {(F22B 37/565 takes precedence)} 37/28 {specially adapted for boiler drums} 37/283 {specially adapted for boiler drums} 37/286 {specially adapted for steam generators of nuclear power plants} 37/30 using impingement against baffle separators 37/30 using impingement against baffle separators	37/265	• • • {Apparatus for washing and purifying steam}		
nuclear power plants} 37/28 involving reversal of direction of flow 37/28 {specially adapted for boiler drums} 37/28 {specially adapted for boiler drums} 37/28 {specially adapted for steam generators of nuclear power plants} 37/30 using impingement against baffle separators 37/54 De-sludging or blow-down devices {(F22B 37/565 takes precedence)} 37/55 {Valves specially adapted therefor (valves in general F16K)} 37/56 Boiler cleaning control devices, e.g. for ascertaining proper duration of boiler blow-down	37/266			
37/28 involving reversal of direction of flow 37/283 {specially adapted for boiler drums} 37/286 {specially adapted for steam generators of nuclear power plants} 37/30 using impingement against baffle separators {(F22B 37/565 takes precedence)} 37/545 {Valves specially adapted therefor (valves in general F16K)} 37/56 Boiler cleaning control devices, e.g. for ascertaining proper duration of boiler blow-down	37/268			-
37/283 {specially adapted for boiler drums} 37/286 {specially adapted for boiler drums} 37/286 {specially adapted for steam generators of nuclear power plants} 37/30 using impingement against baffle separators 37/30 using impingement against baffle separators 37/30 (Valves specially adapted therefor (valves in general F16K)} 37/56 (Valves specially adapted therefor (valves in general F16K)} 37/56 (Specially adapted therefor (valves in general F16K)) 37/56 (Specially adapted therefor (valves in general F16K)) 37/56 (Specially adapted therefor (valves in general F16K))			37/54	
37/286 {specially adapted for steam generators of nuclear power plants} 37/30 using impingement against baffle separators general Fi6K)} 37/56 Boiler cleaning control devices, e.g. for ascertaining proper duration of boiler blow-down	37/28		05/5/5	
37/30 using impingement against baffle separators 37/56 Boiler cleaning control devices, e.g. for ascertaining proper duration of boiler blow-down			37/545	
37/30 using impingement against baffle separators ascertaining proper duration of boiler blow-down	37/286		27/57	
37/30 using impingement against barrie separators			37/30	
3//303 {specially adapted for boiler drums}				ascertaining proper duration of botter blow-down
	37/303	• • • {specially adapted for boiler drums}		

37/565	• • • {Blow-down control, e.g. for ascertaining proper duration of boiler blow-down}
37/58	Removing tubes from headers or drums; Extracting tools
37/60	 specially adapted for steam boilers of instantaneous or flash type
37/62	specially adapted for steam boilers of forced-flow type
37/64	Mounting of, or supporting arrangements for, tube units (construction of tube walls of furnaces, e.g. boiler furnaces F23M 5/08)
37/645	 {involving upper vertically-disposed water tubes and lower horizontally- or helically disposed water tubes}
37/66	• • • involving vertically-disposed water tubes (F22B 37/645 takes precedence)
37/68	• • • involving horizontally-disposed water tubes (F22B 37/645 takes precedence)
37/70	Arrangements for distributing water into water tubes
37/72	involving injection devices
37/74	• • • Throttling arrangements for tubes or sets of tubes
37/76	 Adaptations or mounting of devices for observing existence or direction of fluid flow (devices per se G01P)
37/78	 Adaptations or mounting of level indicators (level indicators per se G01F)