CPC COOPERATIVE PATENT CLASSIFICATION

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

LIGHTING; HEATING

F23 COMBUSTION APPARATUS; COMBUSTION PROCESSES (NOTE omitted)

F23K FEEDING FUEL TO COMBUSTION APPARATUS (fuel feeders specially adapted for fluidised bed combustion apparatus F23C 10/22)

1/00	Preparation of lump or pulverulent fuel in
1 /0.2	readiness for delivery to combustion apparatus
1/02	• Mixing solid fuel with a liquid, e.g. preparing slurries
1/04	 Heating fuel prior to delivery to combustion apparatus
2/00	**
3/00	Feeding or distributing of lump or pulverulent fuel
3/02	to combustion apparatusPneumatic feeding arrangements, i.e. by air blast
3/02	 Fneumatic reeding arrangements, i.e. by an orast for locomotive boiler furnaces
3/04 3/06	
3/08	for shaft-type furnacesfor furnaces having movable grate bars
3/08	 Information and the second seco
3/10	
3/12	feeding by pistonfeeding by screw
3/14	• Over-feed arrangements
3/18	Spreader stokers
3/20	• • • spreader stokers
3/20	Controlling thickness of fuel bed
3122	-
5/00	Feeding or distributing other fuel to combustion
	apparatus
5/002	• {Gaseous fuel}
5/005	• • {from a central source to a plurality of burners}
5/007	• {Details}
5/02	• Liquid fuel
5/04	• Feeding or distributing systems using pumps (from a central source to a plurality of burners F23K 5/06)
5/06	. from a central source to a plurality of burners
5/08	• • Preparation of fuel
5/10	• • • Mixing with other fluids
5/12	• • • Preparing emulsions (burners spraying
	an emulsion of water and fuel into the
	combustion space <u>F23D 11/16</u>)
5/14	• Details thereof
5/142	• • {Fuel pumps}
5/145	• • • {combined with fans}
5/147	· · · {Valves}
5/16	 Safety devices (cleaning or purging devices, e.g. filters <u>F23K 5/18</u>)
5/18	Cleaning or purging devices, e.g. filters
5/20	Preheating devices (in burners using a direct
	spraying action of liquid droplets or vaporised
	liquid into the combustion space $F23D 11/44$)

5/22	• • Vaporising devices (in burners using a direct spraying action of liquid droplets or vaporised liquid into the combustion space F23D 11/44)
2200/00	Pretreatment and supply of solid fuel
2201/00	Pretreatment of solid fuel
2201/10	• Pulverizing
2201/1003	Processes to make pulverulent fuels
2201/1006	• • Mills adapted for use with furnaces
2201/101	• • to a specific particle size
2201/103	• • with hot gas supply
2201/20	• Drying
2201/30	• Separating
2201/50	• Blending
2201/501	• • with other fuels or combustible waste
2201/503	• • with non-combustible liquids to prepare slurries
2201/505	• • with additives
2203/00	Feeding arrangements
2203/002	• Feeding devices for steam boilers, e.g. in
	locomotives
2203/004	. Feeding devices with reciprocating members
2203/006	. Fuel distribution and transport systems for
	pulverulent fuel
2203/008	. Feeding devices for pulverulent fuel
2203/10	• Supply line fittings
2203/101	• • Wear protection devices
2203/102	• Flashback safety, e.g. inertizing devices
2203/103	Storage devices
2203/104	• • Metering devices
2203/105	• Flow splitting devices to feed a plurality of
	burners
2203/20	 Feeding/conveying devices
2203/201	• • using pneumatic means
2203/202	• • using screws
2203/203	• using pistons or rams
2300/00	Pretreatment and supply of liquid fuel
2300/10	• Pretreatment
2300/101	• • Application of magnetism or electricity
2300/103	• • Mixing with other fluids
2300/20	Supply line arrangements
2300/201	• • Pumps
2300/202	Filtering
2300/203	• • Purging
2300/204	• Preheating

F23K

2300/205	. Vaporising
2300/206	Control devices
2400/00	Pretreatment and supply of gaseous fuel
2400/00	. Pretreatment
2400/10	Supply line arrangements
2400/201	Control devices
2900/00	Special features of, or arrangements for fuel supplies
2900/00001	• Treating the fuel, either liquid or gaseous, with
2900/00001	sound waves to enhance fuel properties
2000/00002	
2900/00002	• Treating the fuel, either liquid or gaseous, with far- infrared radiations [FIR] to enhance fuel properties
2900/01001	• Cleaning solid fuel before combustion to achieve
	reduced emissions
2900/01002	• Treating solid fuel with electromagnetic fields
	before combustion
2900/01003	0
	pressure environment
2900/01041	 Heating by using exhaust gas heat
2900/03001	Airlock sections in solid fuel supply lines
2900/05001	. Control or safety devices in gaseous or liquid fuel
	supply lines
2900/05002	• Valves for gaseous fuel supply lines
2900/05003	• Non-continuous fluid fuel supply
2900/05004	• Mixing two or more fluid fuels
2900/05081	Treating the fuel with catalyst to enhance combustion
2900/05082	
2900/03082	. Removing gaseous substances from liquid fuel line,
	e.g. oxygen
2900/05083	e.g. oxygenSeparating watery fractions from liquid fuel
2900/05083 2900/05084	
	Separating watery fractions from liquid fuel