

ABSTRACT

DEVICE FOR DESTRUCTIVE DISTILLATION OF COAL

Provided is a device for the destructive distillation of coal, 5 said device suppressing increases in the concentration of mercury within destructively distilled coal generated by the device. The device for the destructive distillation of coal is a rotary kiln in which an inner cylinder (102) is rotatably supported inside an outer cylinder (103), thermal gas (11) is supplied to interior of 10 the outer cylinder and dried coal (1) is supplied to the interior of the inner cylinder from one end side thereof, the dried coal is subjected to thermal destructive distillation whilst being moved and agitated from the one end side of the inner cylinder to the other end side thereof due to the inner cylinder being rotated, and 15 destructively distilled coal (2) and destructively distilled gas (12) are delivered from the other end side of the inner cylinder. The device includes: a chute (104) that is provided continuously from the other end side of the inner cylinder and discharges the destructively distilled coal; an exhaust line (106) that is provided 20 continuously from the chute and discharges the destructively distilled gas; and a gas flow adjustment device (110) that is provided to the chute and adjusts the flow of the destructively distilled gas discharged towards the exhaust line (106).

FIG.1A

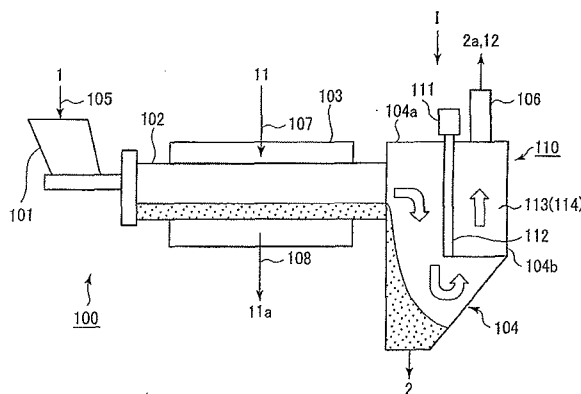


FIG.1B

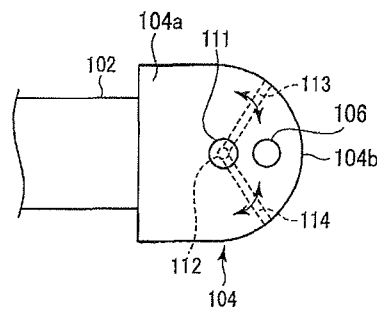


FIG.1A

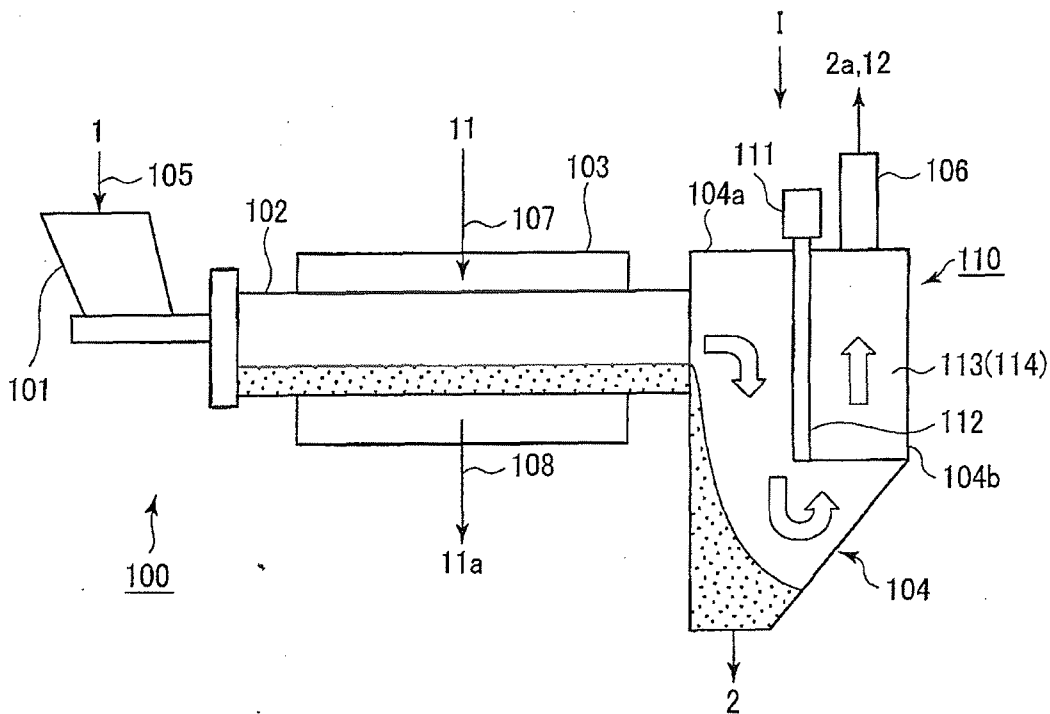


FIG.1B

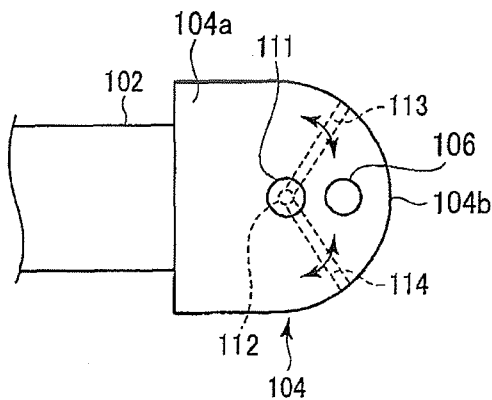


FIG.2

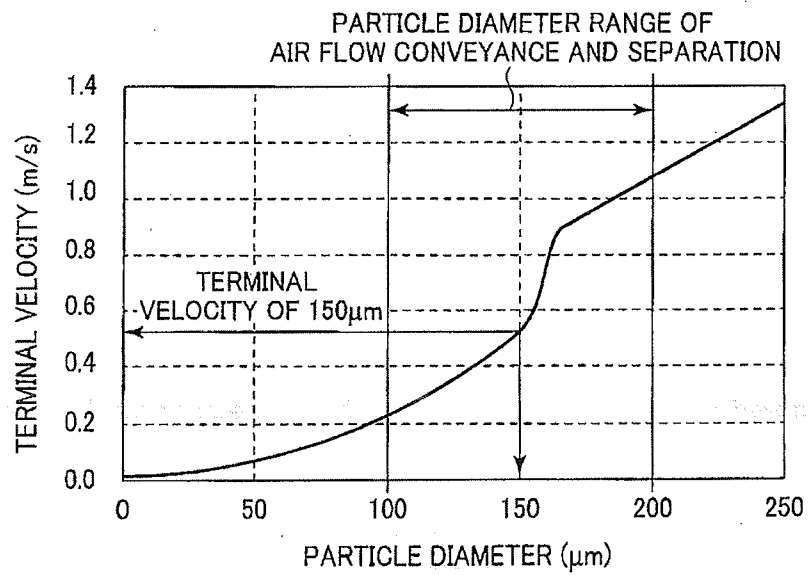


FIG.3

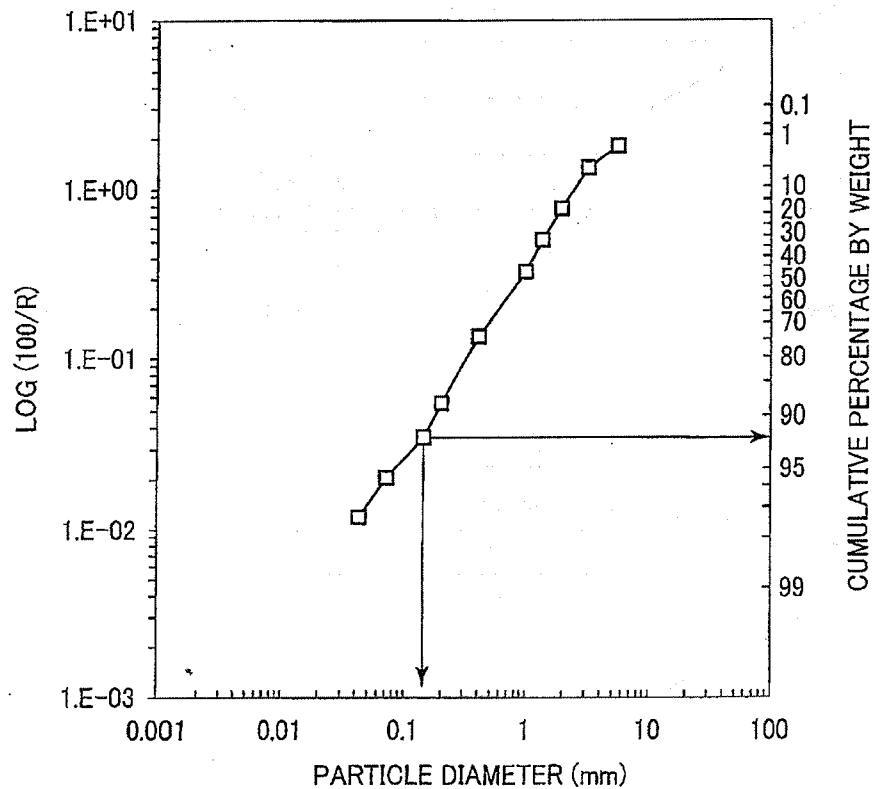


FIG.4

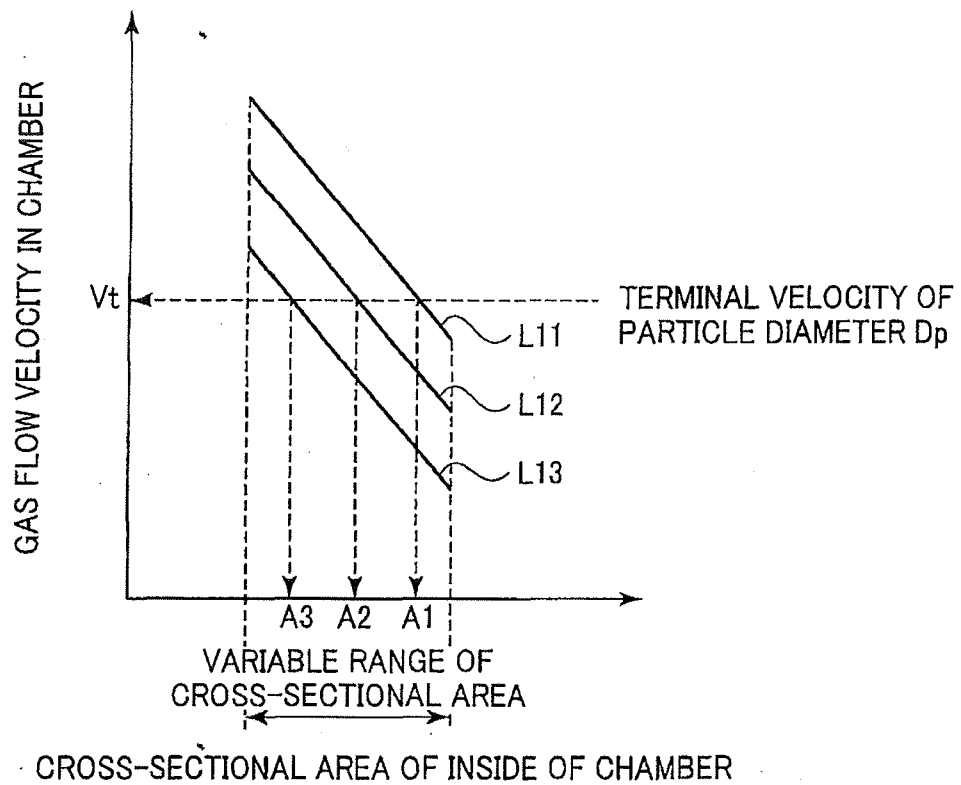


FIG.5A

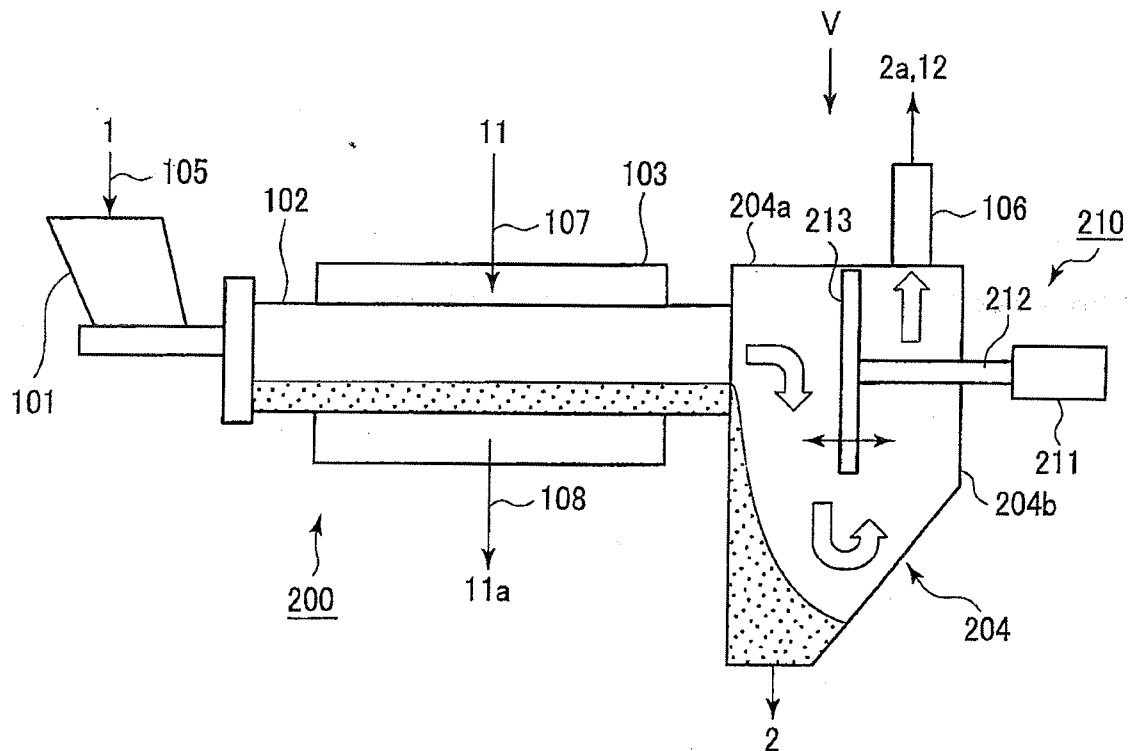


FIG. 5B

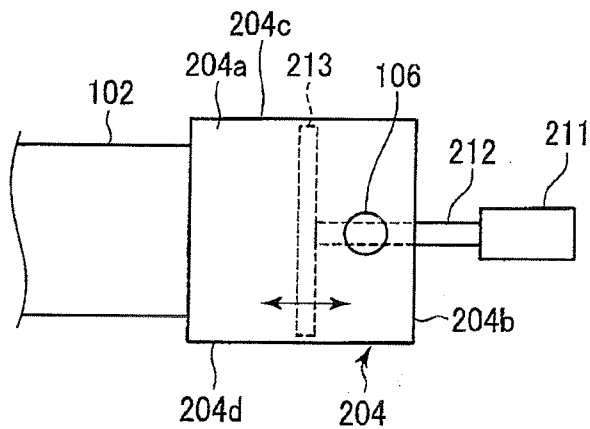


FIG.6A

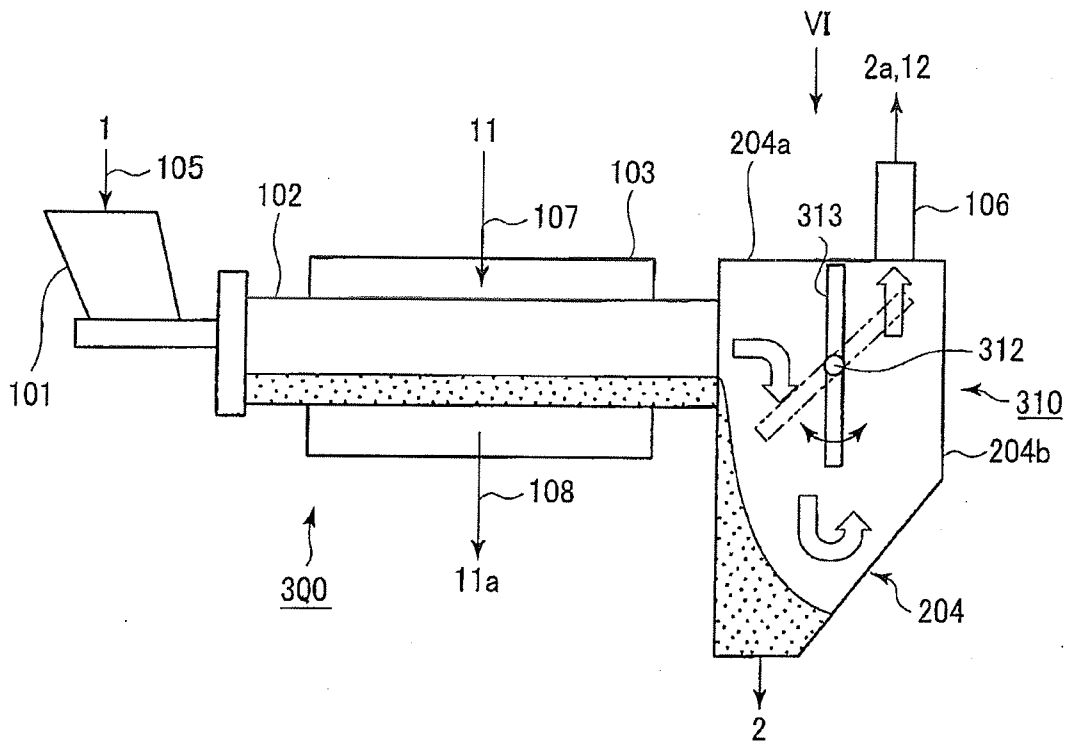


FIG.6B

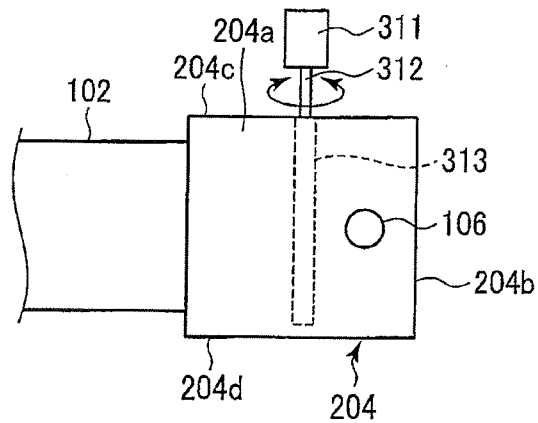


FIG.7A

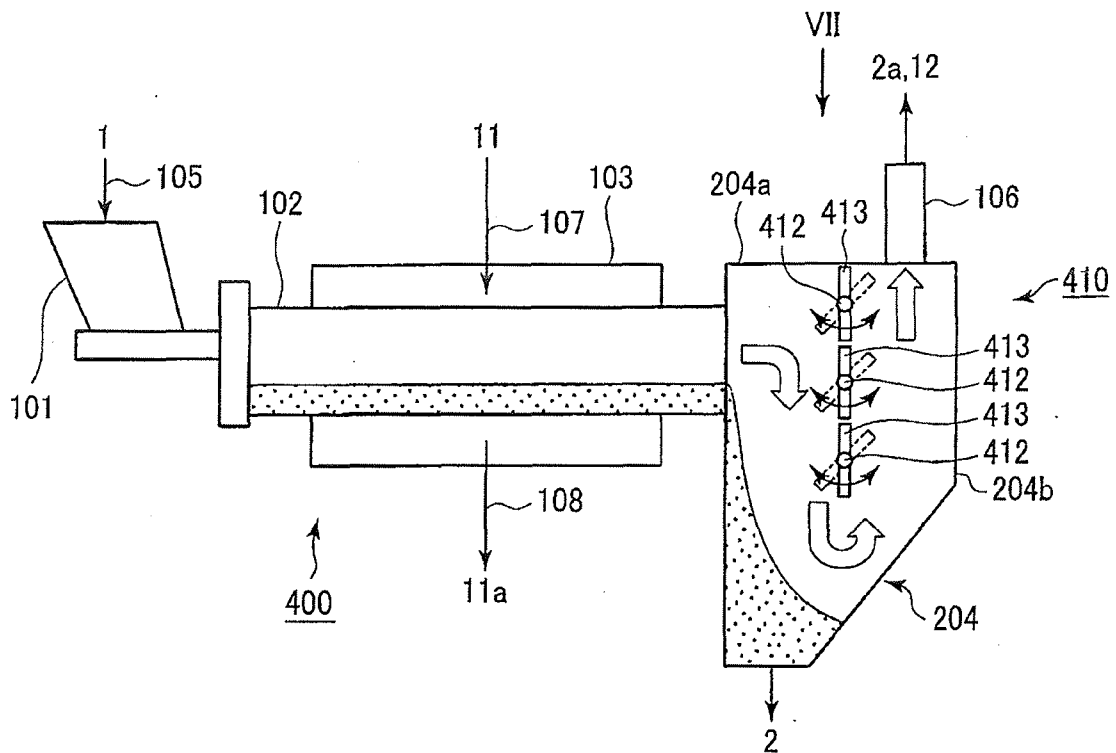


FIG.7B

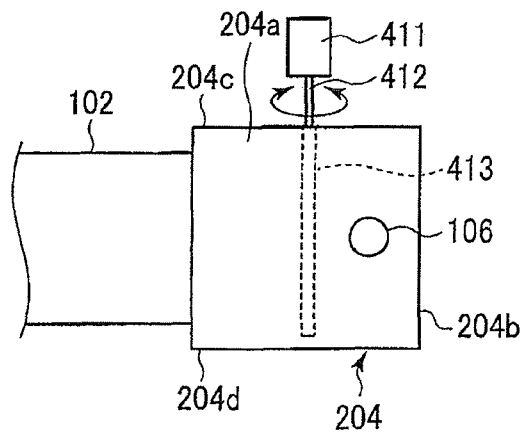
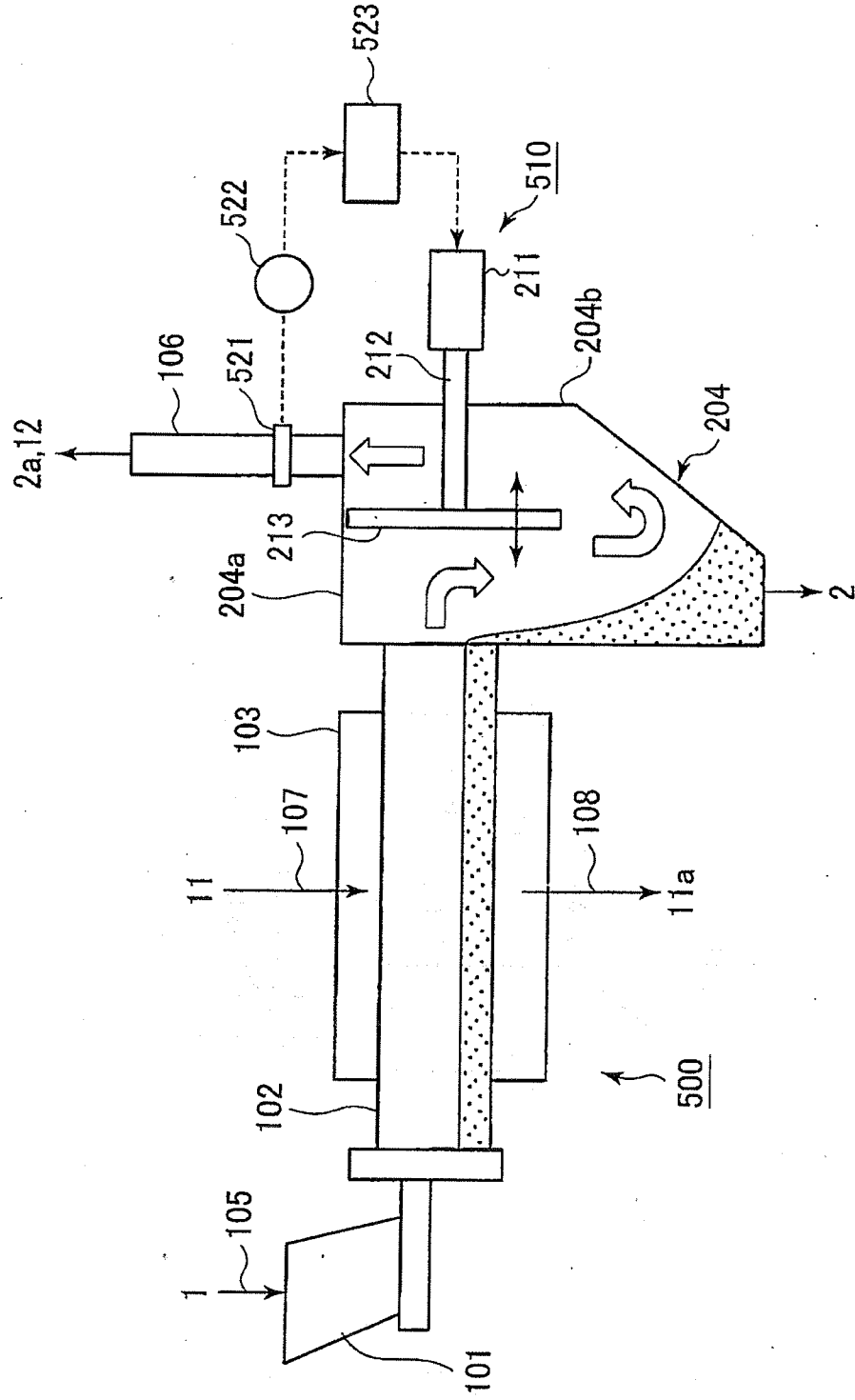


FIG.8



Apurva
 APARNA KAREER
 OBHAN & ASSOCIATES
 AGENT FOR THE APPLICANTS

FIG. 9A

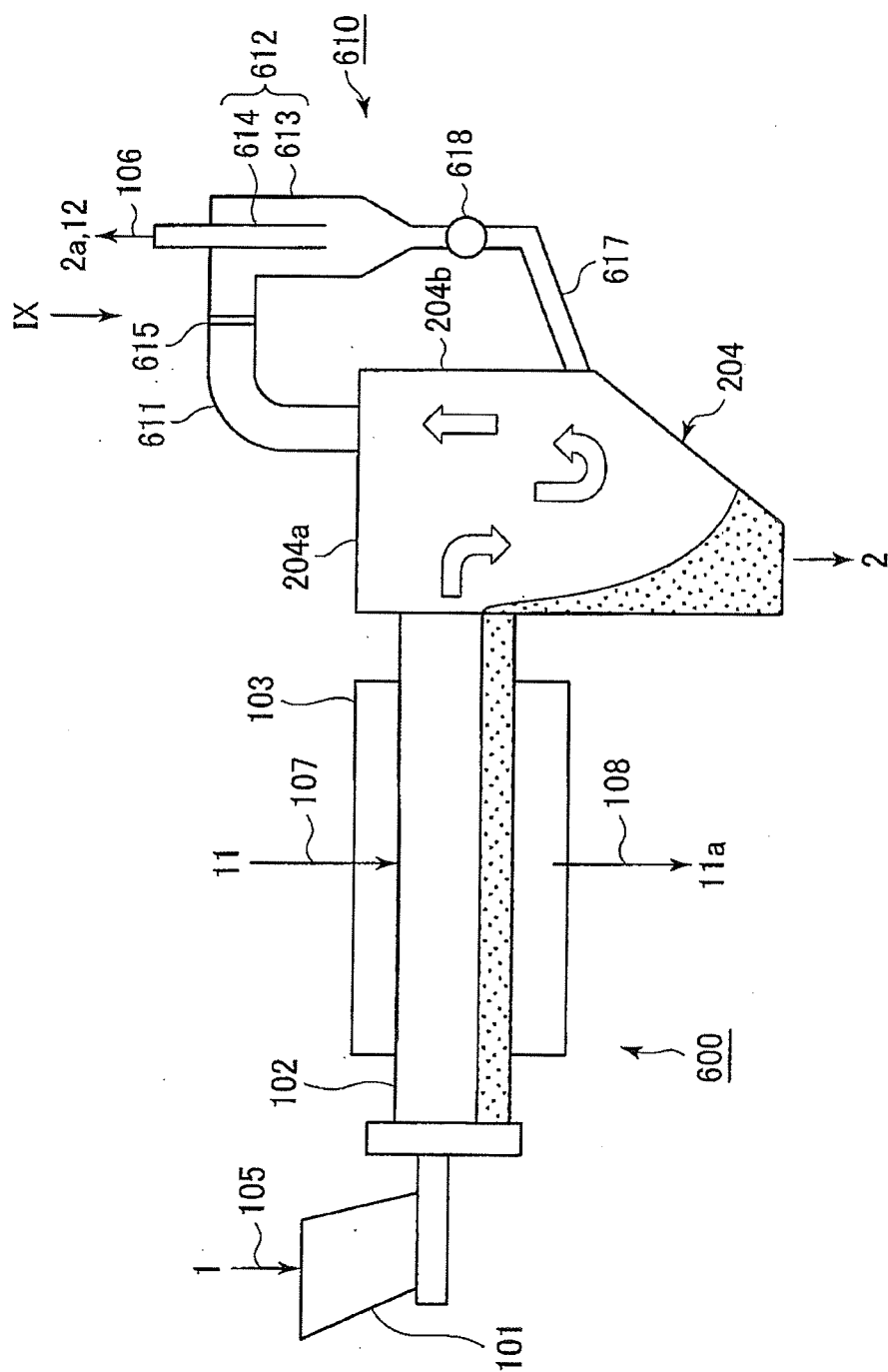
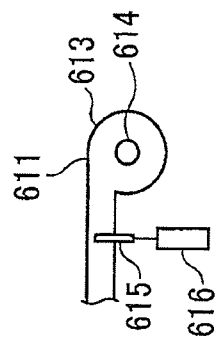


FIG. 9B



Law

**APARNA KAREER
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AGENT FOR THE APPLICANTS**

FIG.10

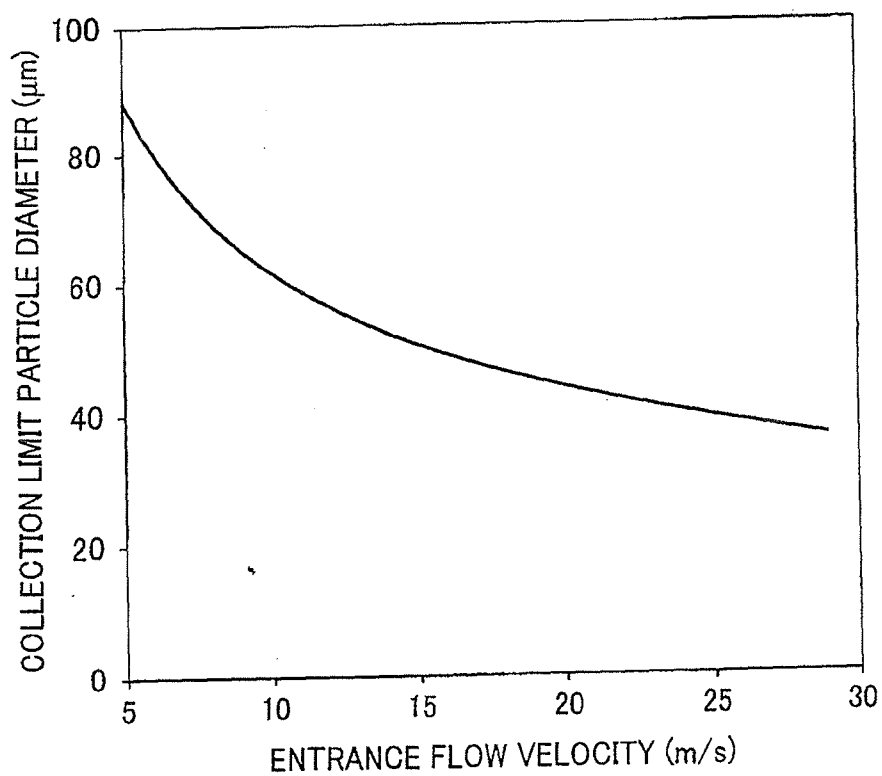
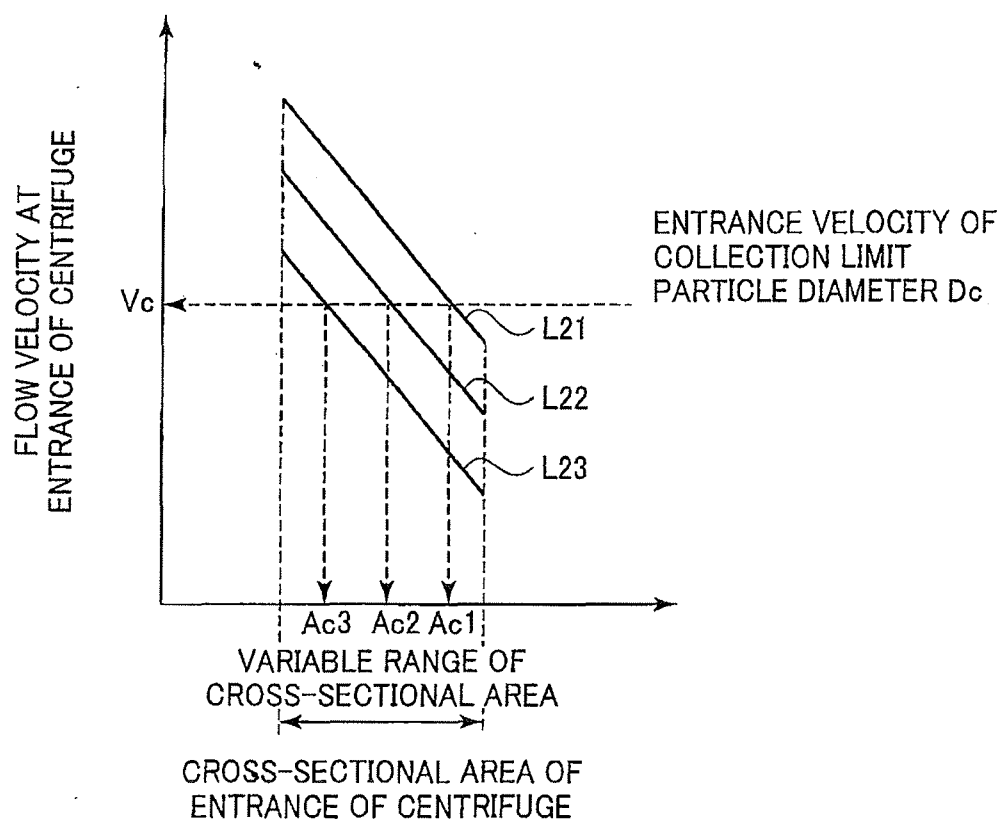


FIG.11



EXPLANATIONS OF REFERENCE NUMERALS

	1	DRY COAL
5	2	PYROLIZED COAL
	2a	FINE PYROLIZED COAL
	100	COAL PYROLIZING DEVICE
	101	HOPPER
	102	INNER TUBE
10	103	OUTER TUBE
	104	CHUTE
	105	DRY COAL CONVEYING LINE
	106	EXHAUST LINE
	107	HEATING GAS FEED LINE
15	108	EXHAUST GAS LINE
	110	GAS FLOW-VELOCITY REGULATING DEVICE
	111	MOTOR
	112	OUTPUT SHAFT (SHAFT BODY)
	113, 114	PARTITION PLATE (PLATE BODY)
20	200	COAL PYROLIZING DEVICE
	204	CHUTE
	210	GAS FLOW-VELOCITY REGULATING DEVICE
	211	DRIVE CYLINDER
	212	CYLINDER ROD (SHAFT BODY)
25	213	PARTITION PLATE
	300	COAL PYROLIZING DEVICE
	310	GAS FLOW-VELOCITY REGULATING DEVICE
	311	MOTOR
	312	OUTPUT SHAFT (SHAFT BODY)
30	313	PARTITION PLATE
	400	COAL PYROLIZING DEVICE

- 410 GAS FLOW-VELOCITY REGULATING DEVICE
- 411 MOTOR
- 412 OUTPUT SHAFT (SHAFT BODY)
- 413 PARTITION PLATE
- 5 500 COAL PYROLIZING DEVICE
- 510 GAS FLOW-VELOCITY REGULATING DEVICE
- 521 GAS FLOW-VELOCITY DETECTOR
- 522 FLOW METER
- 523 CONTROL DEVICE
- 10 600 COAL PYROLIZING DEVICE
- 610 GAS FLOW-VELOCITY REGULATING DEVICE
- 611 FEED PIPE
- 612 CENTRIFUGE
- 613 OUTER TUBE
- 15 614 INNER TUBE
- 615 PARTITION PLATE (SHIELD WALL)
- 616 DRIVE CYLINDER
- 617 DISCHARGE PIPE
- 618 ROTARY VALVE