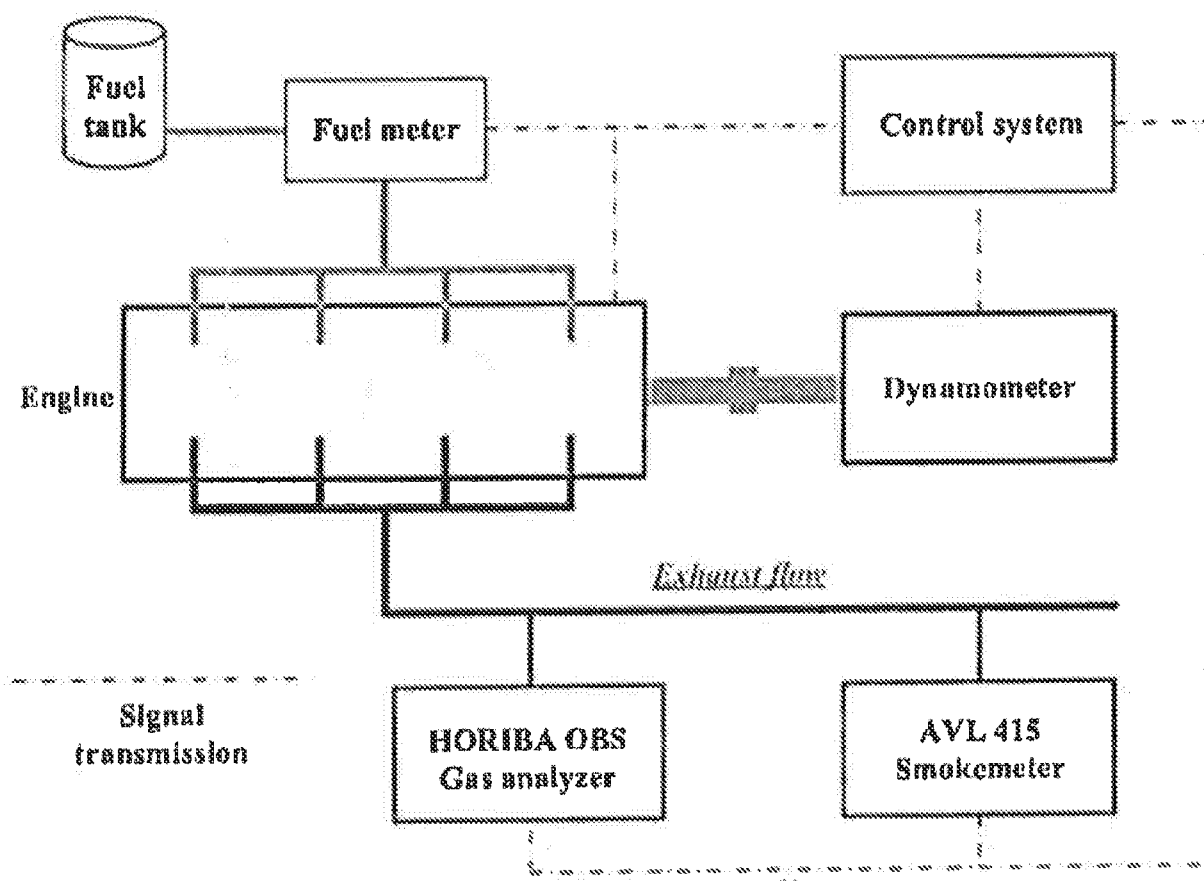




Test bench system diagram

FIG. 1

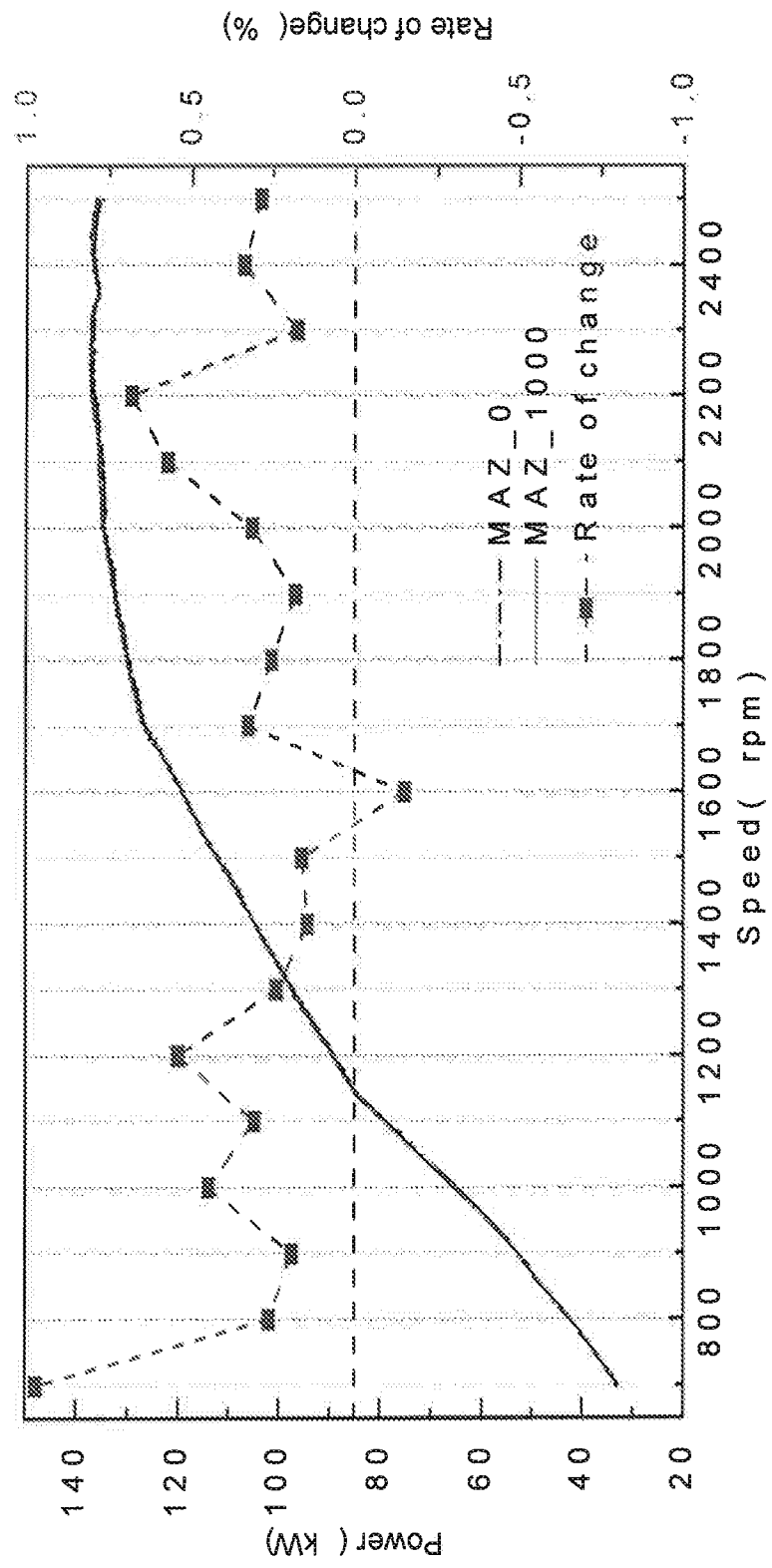


FIG. 2

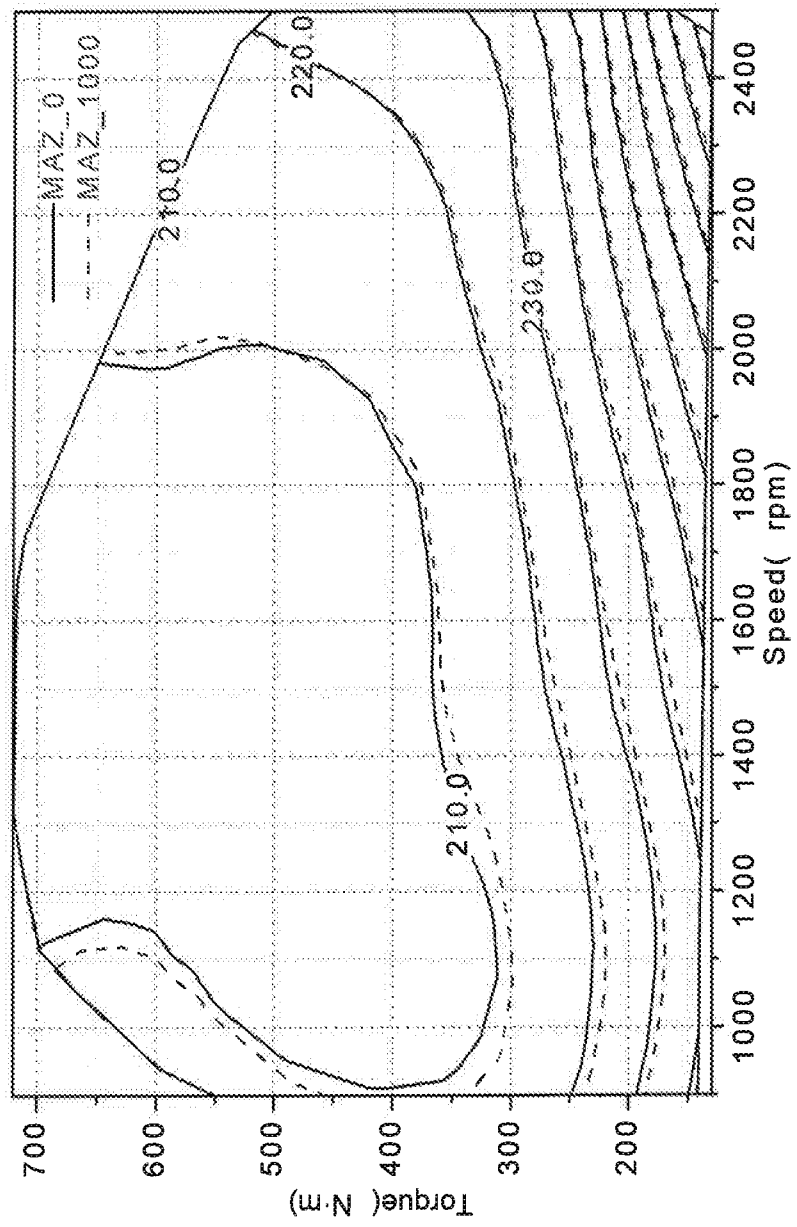


FIG. 3

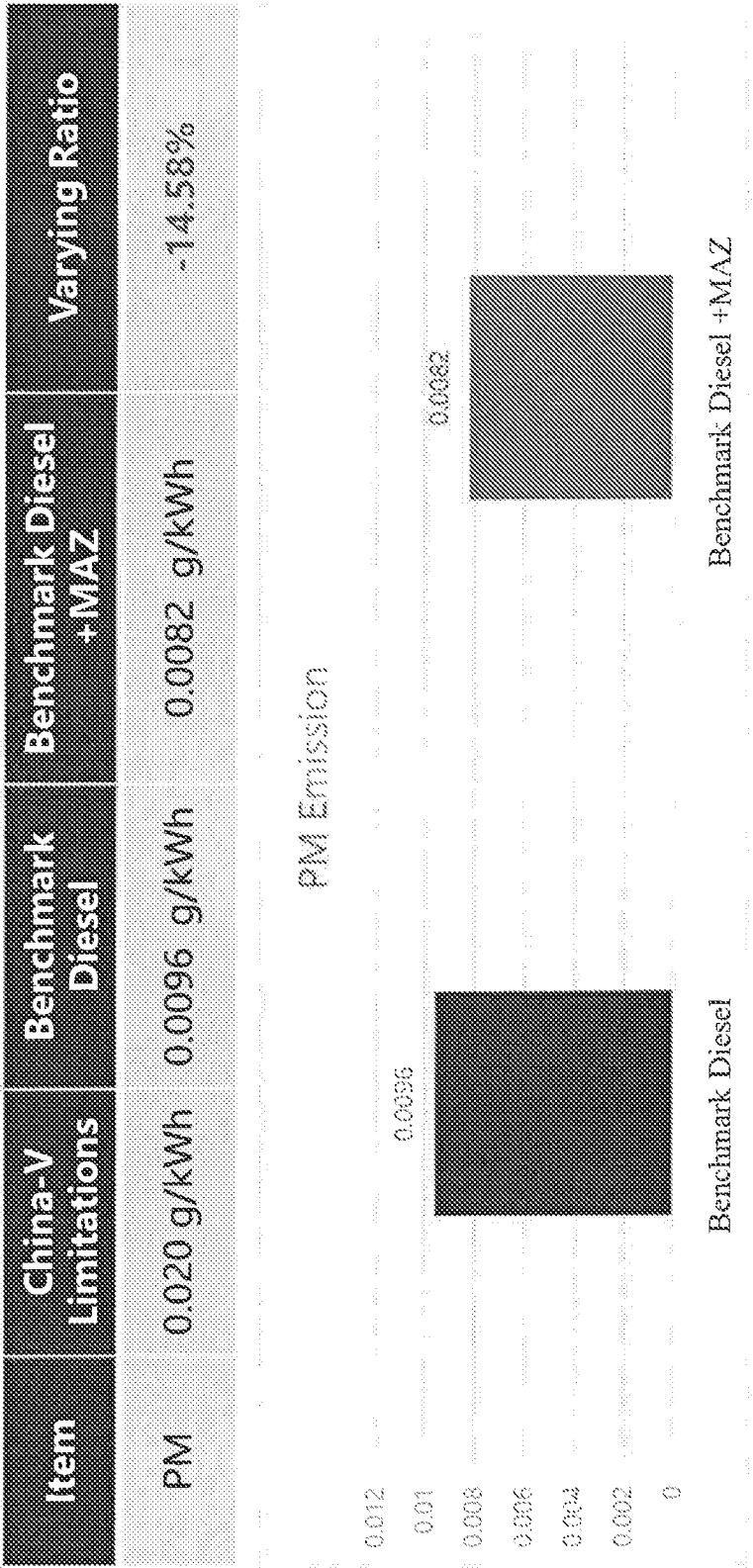


FIG. 4

Operating Conditions	1	2	3	4	5	6	7	8	9	10	11	12	13
Benchmark Diesel	0.0026	0.007	0.0037	0.0023	0.006	0.006	0.003	0.0039	0.0052	0.0046	0.0053	0.0031	0.004
Benchmark Diesel +MAZ	0.0011	0.0046	0.0022	0.0009	0.0047	0.0053	0.0028	0.0029	0.0044	0.004	0.0059	0.0033	0.0025
Varing Ratio	-57.69	-31.43	-40.54		-21.67	-11.67	-6.67	-23.69	-15.38	-13.04	-13.24	-6.45	-35.00

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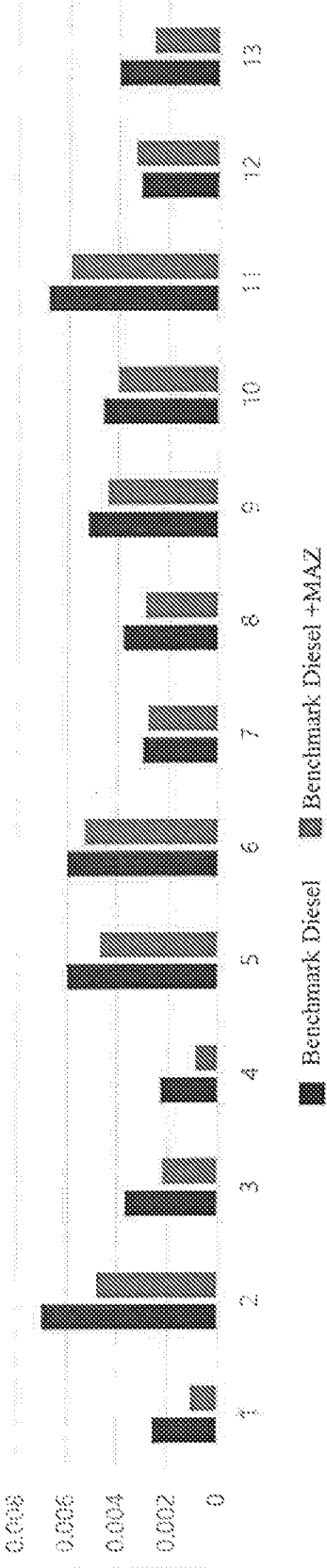


FIG. 5

Item	ESC cycle		
	MAZ_0	MAZ_1000	Decreasing amplitude
NO _x (g/kWh)	1.0475	1.0232	2.32%
CO ₂ (g/kWh)	662.36	657.92	0.67%
CO (g/kWh)	0.3473	0.3395	2.25%
HC (g/kWh)	0.0061	0	100%

FIG. 6

Item	China-V Limitations	Benchmark Diesel	Benchmark Diesel +MAZ	Varying Ratio
PM	0.003 g/kWh	0.0161 g/kWh	0.0152 g/kWh	-5.59%

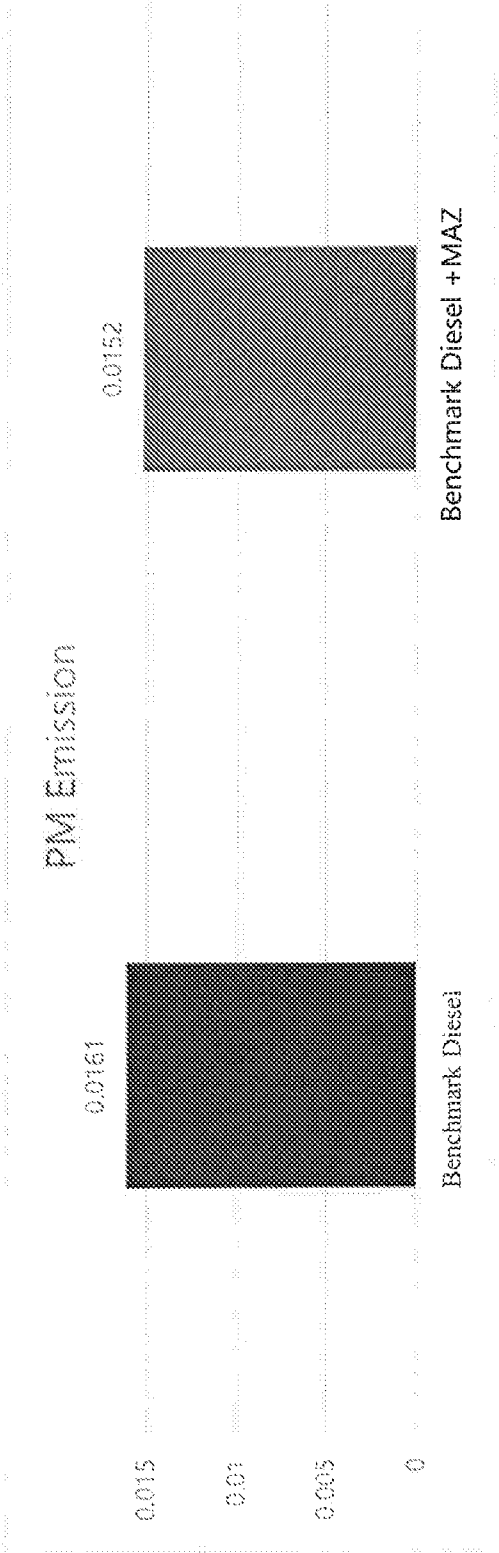


FIG. 7

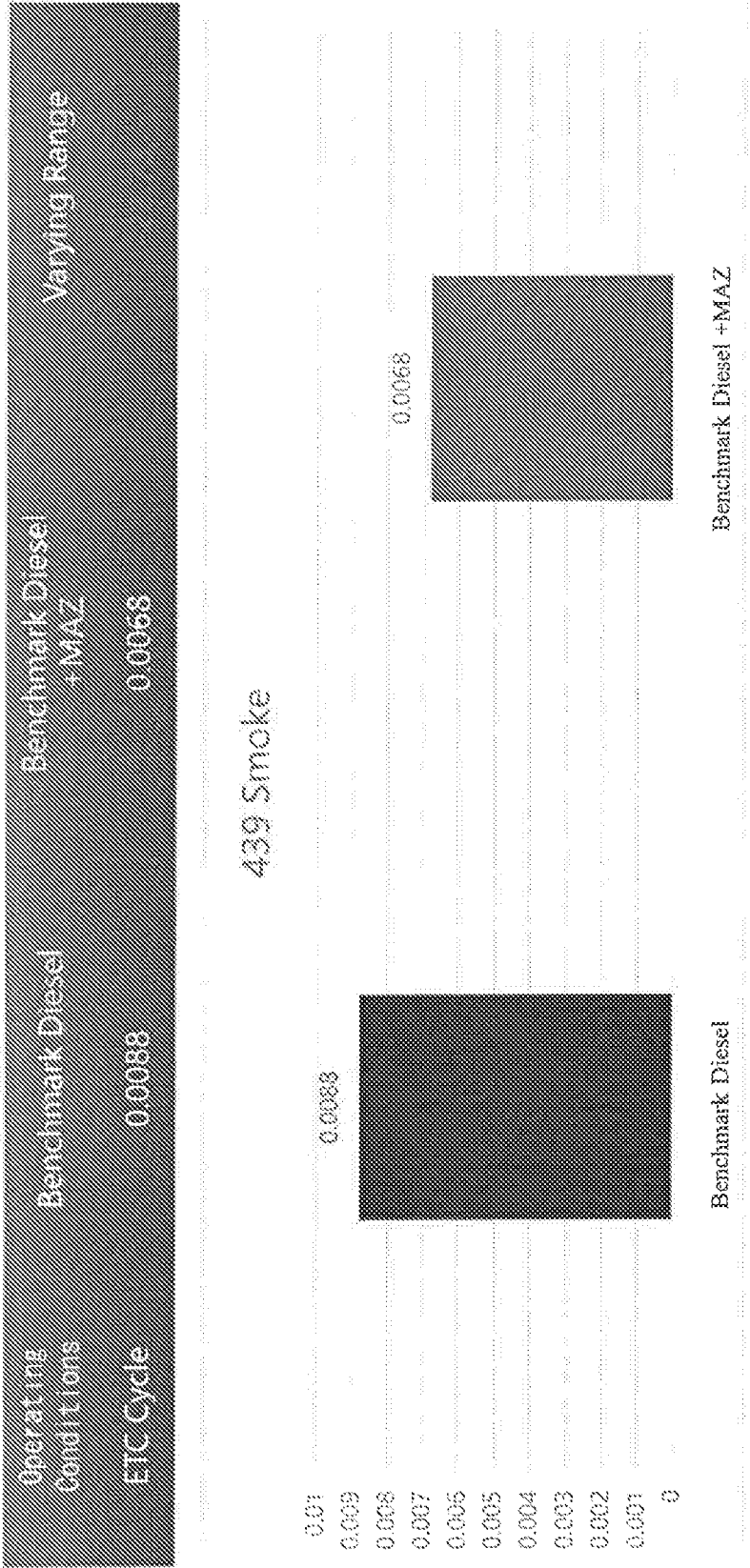


FIG. 8

$$E_{point} = E/P$$

(1)

$$E_{spec} = \sum (E \cdot P) / \sum P$$

(2)

E_{spec}	CO ₂ %/kw	CO ppm/kw	THC ppm/kw	NOx ppm/kw
MAZ_0	6.88	68.4	4.11	918
MAZ_1000	6.78	66.4	3.83	906
Decreasing amplitude%	1.42	2.87	6.82	1.27

FIG. 9

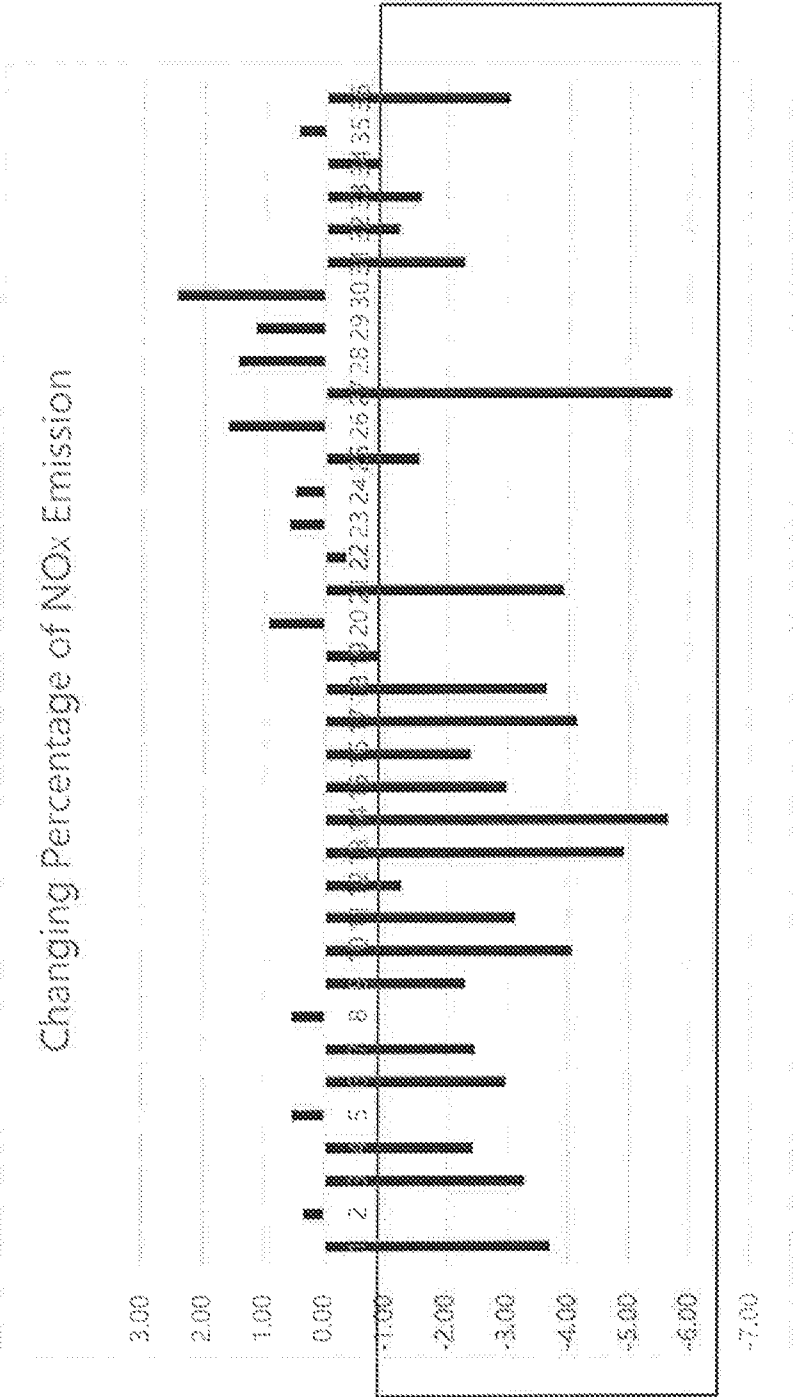


FIG. 10

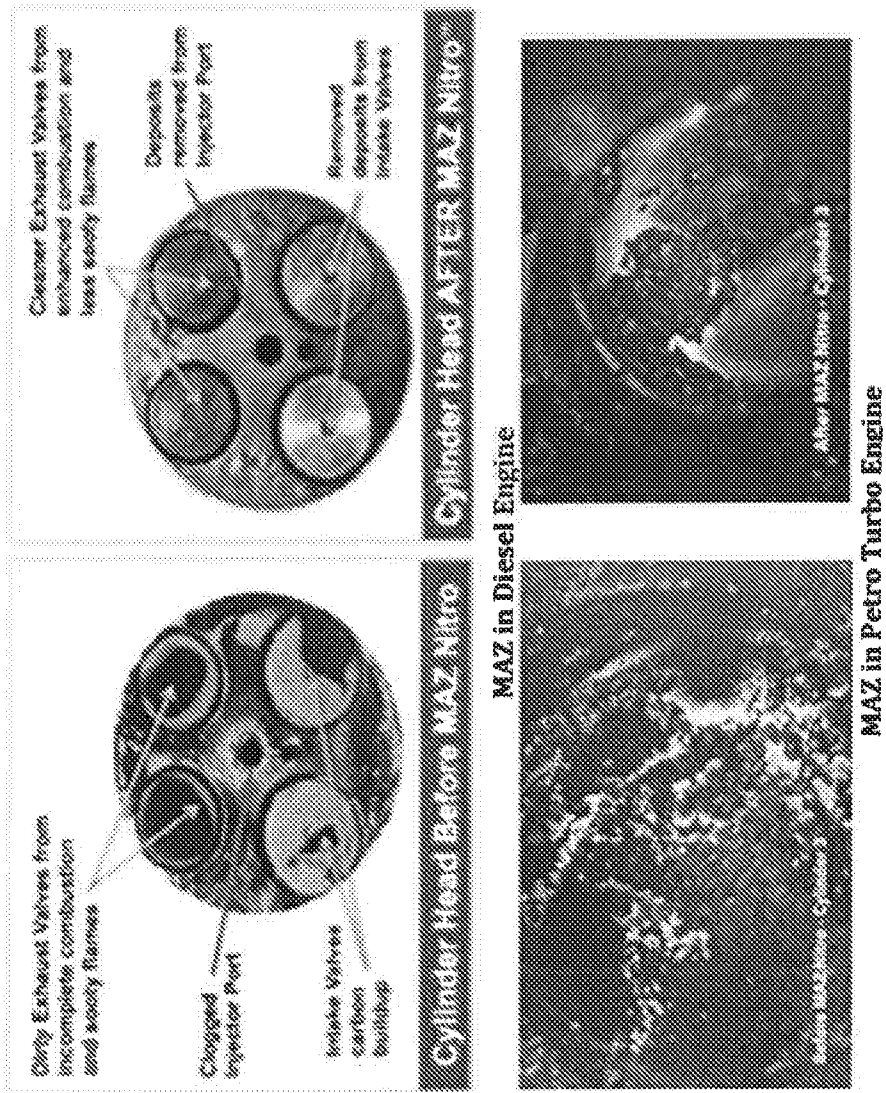


FIG. 11