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FIG. 1

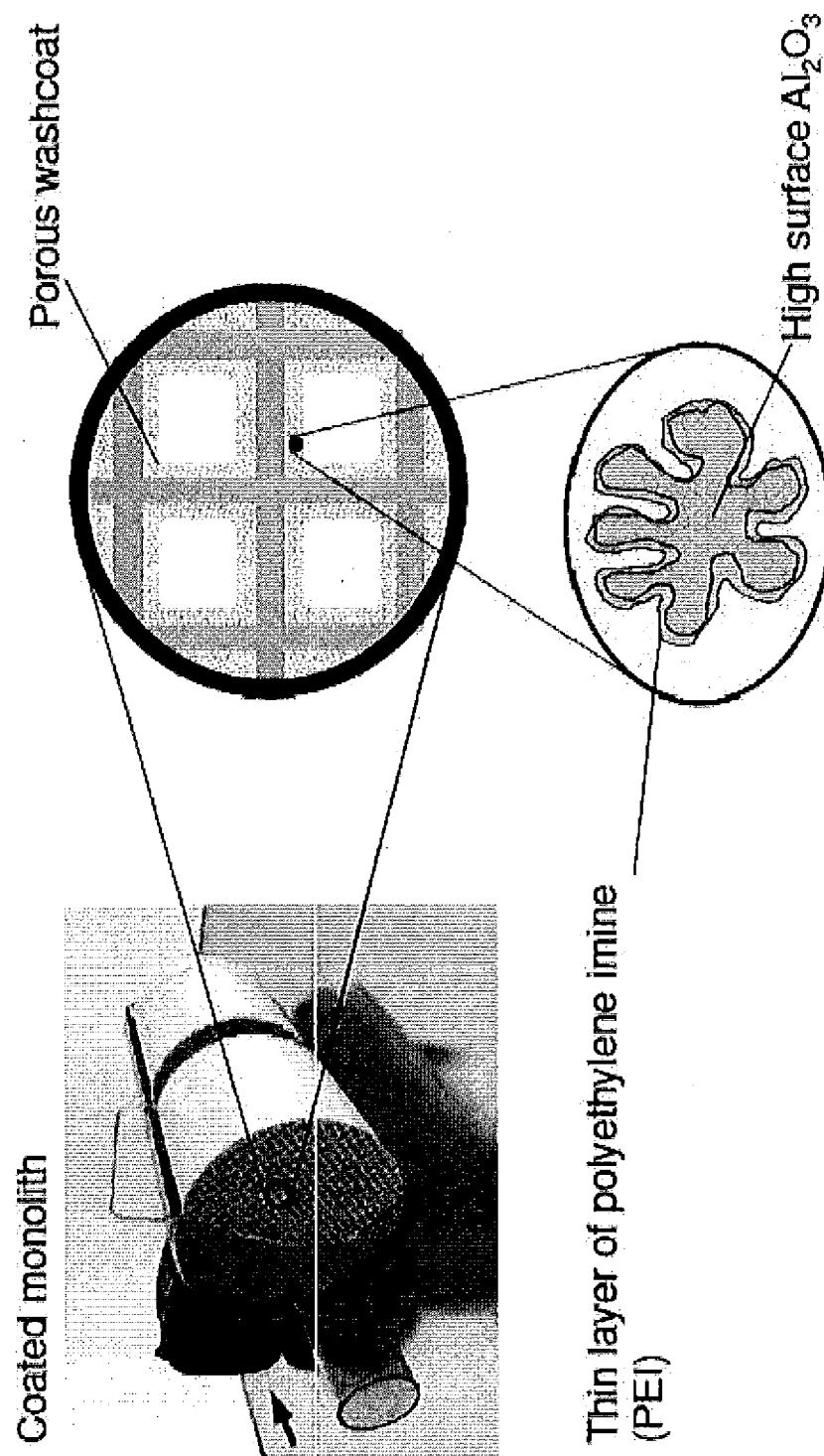
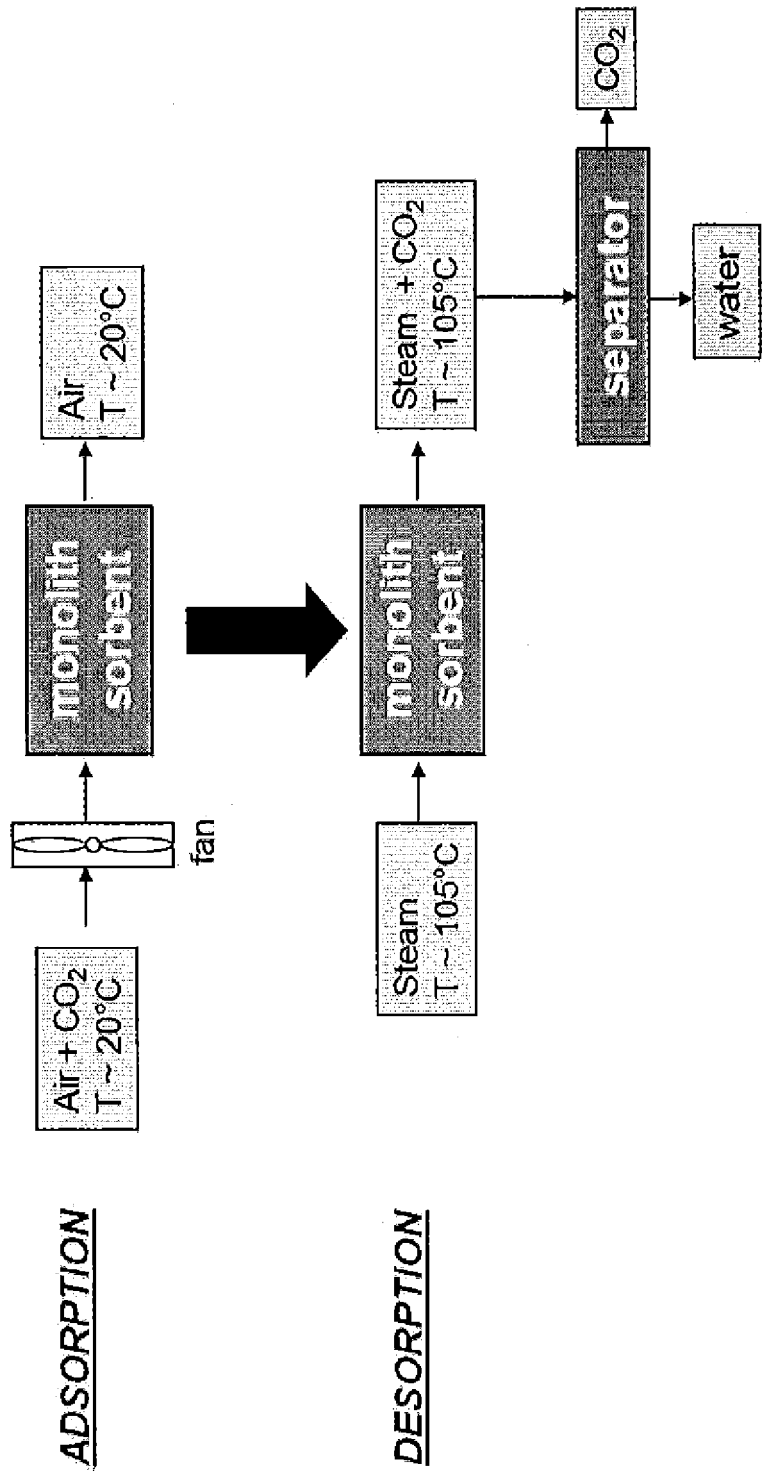


FIG. 2



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FIG. 3

Description	Organic Fraction		CO2 Adsorption mmol/g	Surface Area (m ² /g)					Hg Porosimetry		
	%			Surface Area (m ² /g)	N2 Single Point Pore Volume Radius <1,336 Å (cc/g)	BJH Pore Volume 10-300Å	BJH Primary Pore Radius (Å)	BET Average Pore Radius (Å)	Total Intrusion Volume cc/g	Median Pore Radius (area) Å	Bulk Density g/cc
Alumina A	30	1.4	190.9	0.617	0.600	48.6	64.62	1.282	47	0.558	
Alumina B	28	1.89	175.3	1.245	1.077	102.1	142.03	4.317	74	0.204	
Alumina C	24	0.92	128.0	0.429	0.422	47.0	66.99	0.870	51	0.841	
Alumina D	29	1.15	82.2	0.418	0.413	71.8	101.74	0.911	77	0.768	
Alumina E	26	1.51	174.1	0.826	0.819	68.8	94.95	1.464	68	0.514	
Alumina F	36	1.1	129.0	0.993	0.984	112.4	153.97	1.724	99	0.454	
Alumina G	39	1.16	133.5	1.033	1.026	111.1	154.69	1.697	93	0.483	
Alumina H	27	1.47	91.2	0.981	0.799	126.5	215.08	1.677	142	0.471	
Alumina I	32	1.63	139.5	1.091	0.944	106.5	156.42	2.100	105	0.380	
Alumina J	26	0.84	376.4	0.314	0.211	19.8	16.69	0.764	46	0.757	
Alumina K	26	1.28	145.7	1.178	1.087	116.1	323.32	3.079	117	0.289	

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FIG. 4A

Testing Materials		Material Loadings				Adsorption				
Support Material	Adsorbant Material	Adsorbant Material Loading g/in ²	Organic Loading %	Total Material Amount g	Total Material Loading g/in ²	Adsorbed Amount mg	CO ₂ Adsorbed mmol	Adsorbed CO ₂ per g Total Loading (Support & Adsorbent) mg/g	Adsorbed CO ₂ per g Total Loading (Support & Adsorbent) mmol/g	Adsorbed CO ₂ per g Adsorbant Loading (Adsorbent Only) mmol/g
alumina C	polyethylenimine	0.95	0.40	3.69	2.36	203.68	4.83	55.18	1.25	3.11
alumina C	polyethylenimine	1.40	0.49	4.52	2.88	126.62	2.88	28.01	0.64	1.31
alumina B	polyethylenimine	0.64	0.28	10.76	2.28	894.43	20.33	83.11	1.89	6.69
alumina B	polyethylenimine	1.72	0.51	15.84	3.36	957.42	21.76	60.44	1.37	2.68
alumina B	polyethylenimine	1.07	0.39	12.77	2.71	1079.86	24.54	84.60	1.92	4.87
alumina B	polyethylenimine	0.31	0.16	8.19	1.95	459.03	10.43	49.94	1.13	7.11
alumina B	polyethylenimine	2.05	0.56	17.40	3.69	783.80	17.81	45.04	1.02	1.84
alumina B	polyethylenimine	1.63	0.50	15.39	3.27	1054.00	23.96	68.50	1.56	3.13
alumina K	polyethylenimine	0.44	0.26	8.00	1.70	450.76	10.24	56.35	1.28	4.89
alumina K	polyethylenimine	0.87	0.37	10.96	2.33	653.44	14.85	59.62	1.36	3.64
alumina K	polyethylenimine	1.60	0.52	14.34	3.04	367.76	8.36	25.65	0.58	1.11

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FIG. 4B

Testing Materials		Material Loadings				Desorption				
Support Material	Adsorbant Material	Adsorbant Material Loading g/in ²	Organic Loading %	Total Material Amount g	Total Material Loading g/in ²	Desorbed Amount mg	CO ₂ Desorbed mmol	Desorbed CO ₂ per g Total Loading (Support & Adsorbent) mg / g	Desorbed CO ₂ per g Total Loading (Support & Adsorbent) mmol / g	Desorbed CO ₂ per g Adsorbant Loading (Adsorbent Only) mmol / g
alumina C	polyethylenimine	0.95	0.40	3.69	2.35		0.00	0.00	0.00	0.00
alumina C	polyethylenimine	1.40	0.49	4.52	2.88		0.00	0.00	0.00	0.00
alumina B	polyethylenimine	0.64	0.28	10.76	2.28	777.01	17.66	72.20	1.64	5.81
alumina B	polyethylenimine	1.72	0.51	15.84	3.36	770.17	17.50	48.62	1.10	2.16
alumina B	polyethylenimine	1.07	0.39	12.77	2.71	963.05	21.89	75.44	1.71	4.34
alumina B	polyethylenimine	0.31	0.16	9.19	1.95	480.88	10.93	52.31	1.19	7.45
alumina B	polyethylenimine	2.05	0.56	17.40	3.69	719.37	16.35	41.34	0.94	1.69
alumina B	polyethylenimine	1.63	0.50	15.39	3.27	1048.83	23.84	68.16	1.55	3.11
alumina K	polyethylenimine	0.44	0.26	8.00	1.70	462.24	10.51	57.78	1.31	5.02
alumina K	polyethylenimine	0.87	0.37	10.96	2.33	651.66	14.81	59.46	1.35	3.63
alumina K	polyethylenimine	1.60	0.52	14.34	3.04	486.91	11.07	33.95	0.77	1.47

FIG. 5

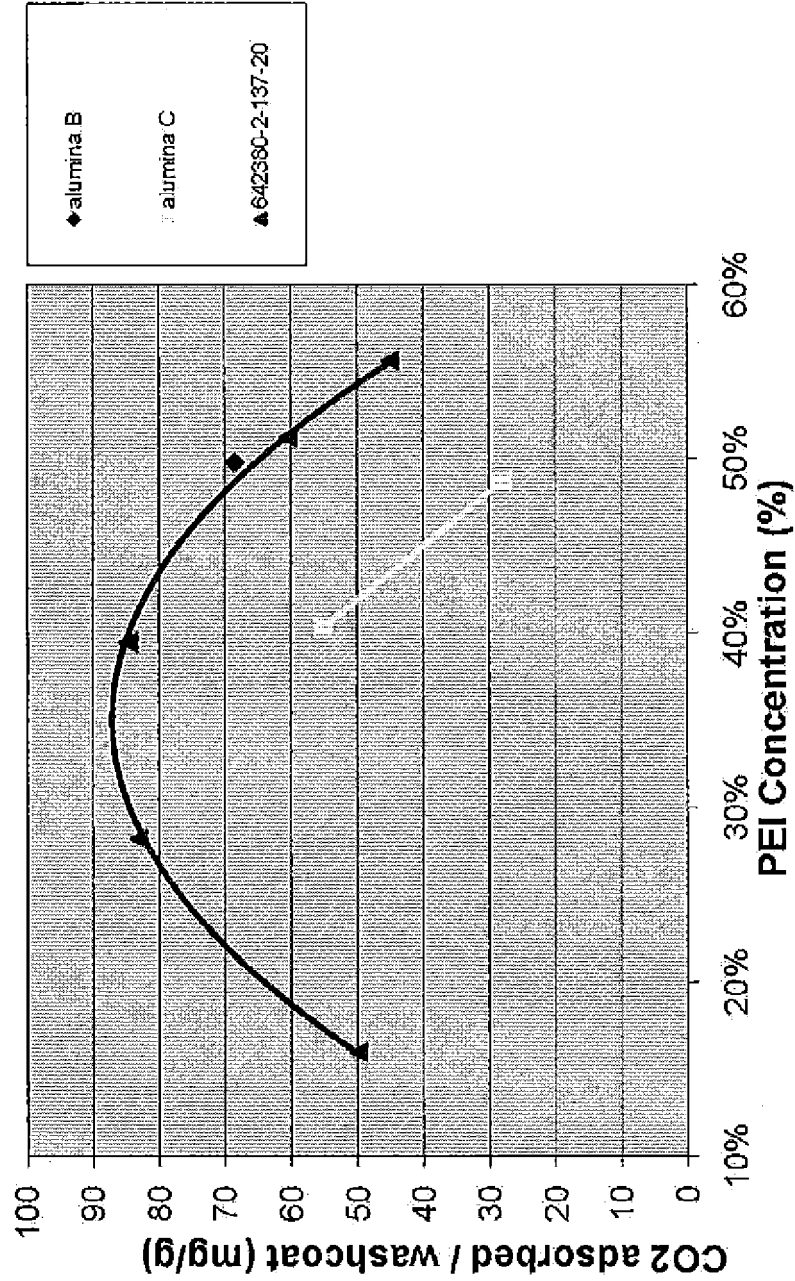
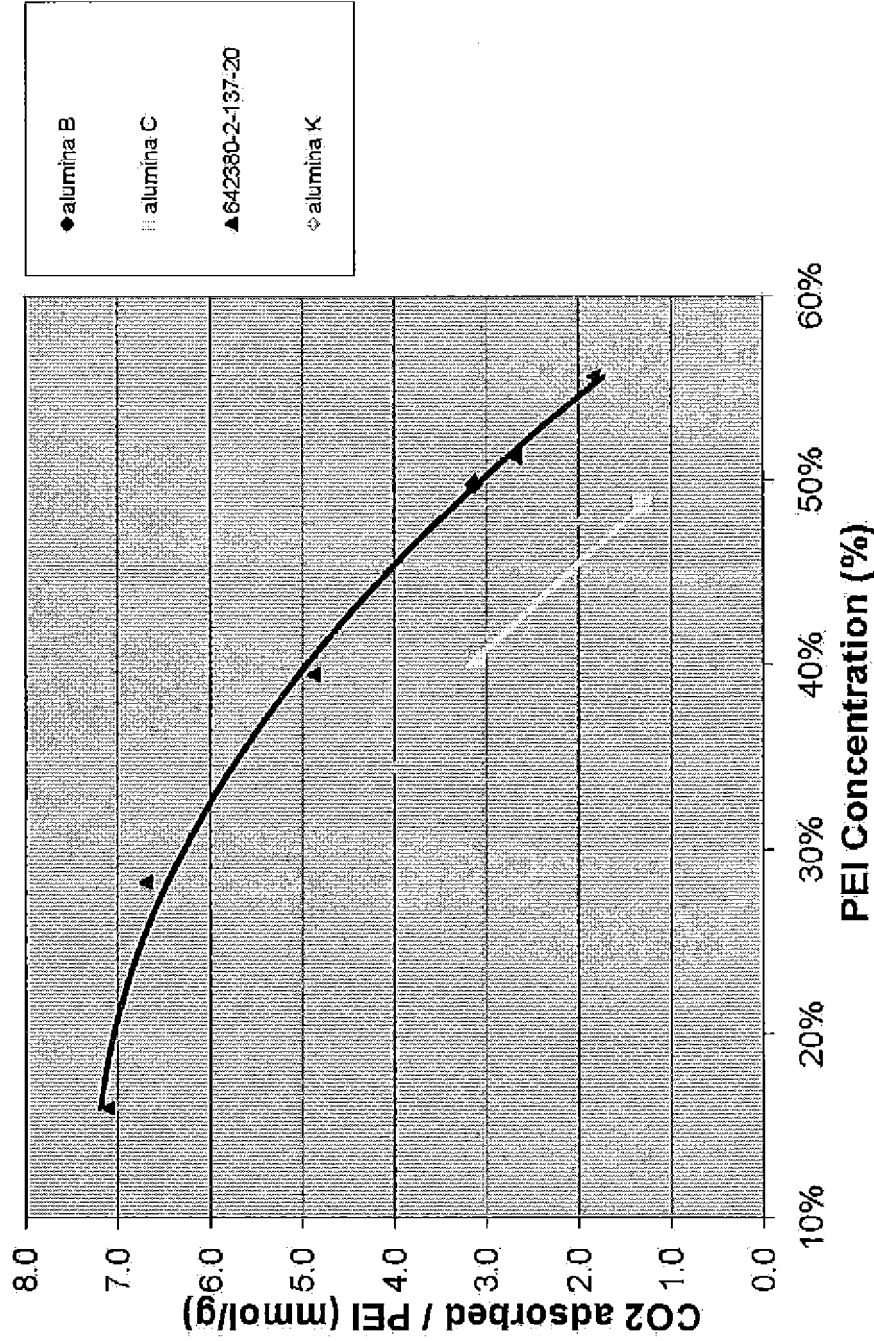
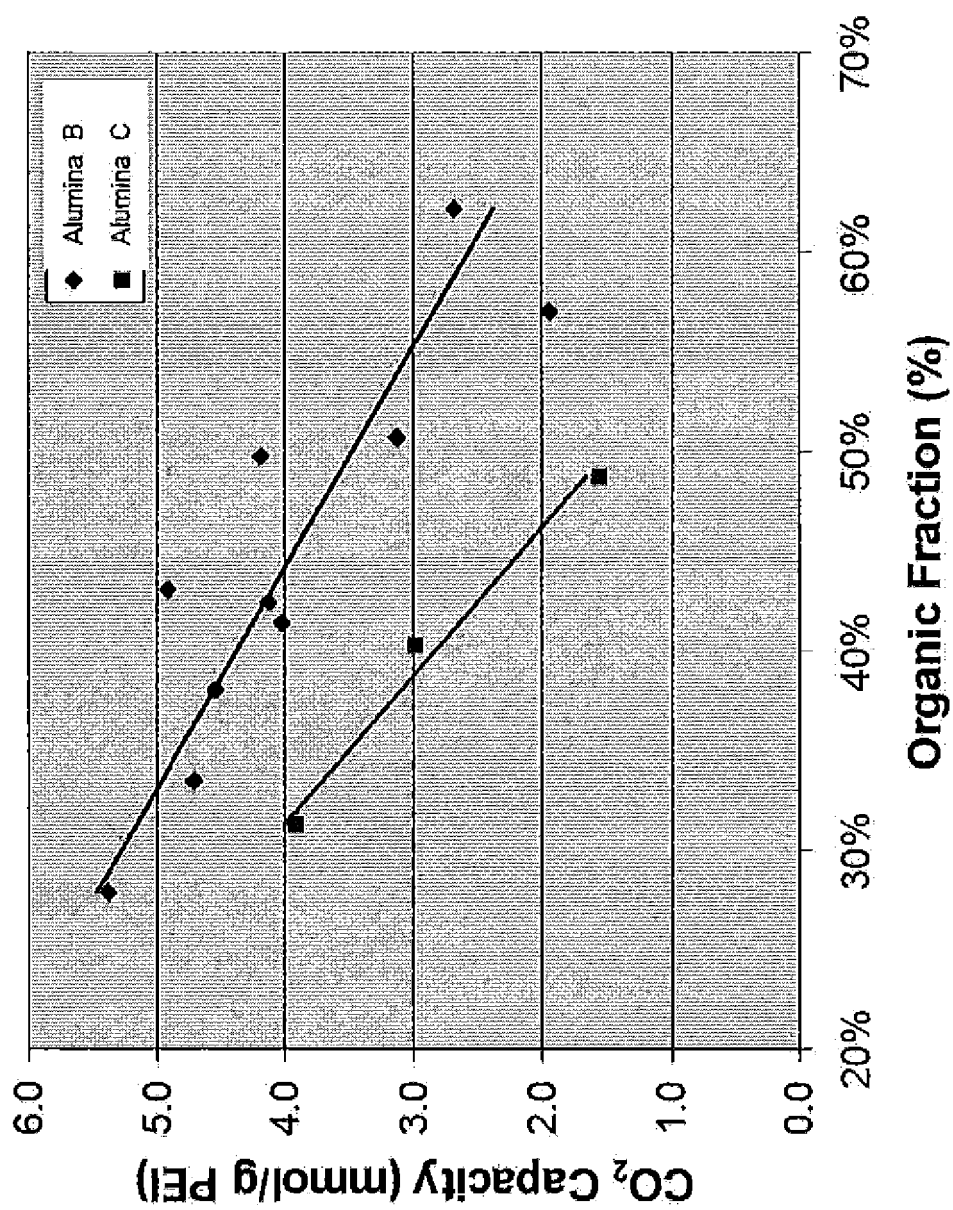


FIG. 6



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FIG. 7



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FIG. 8

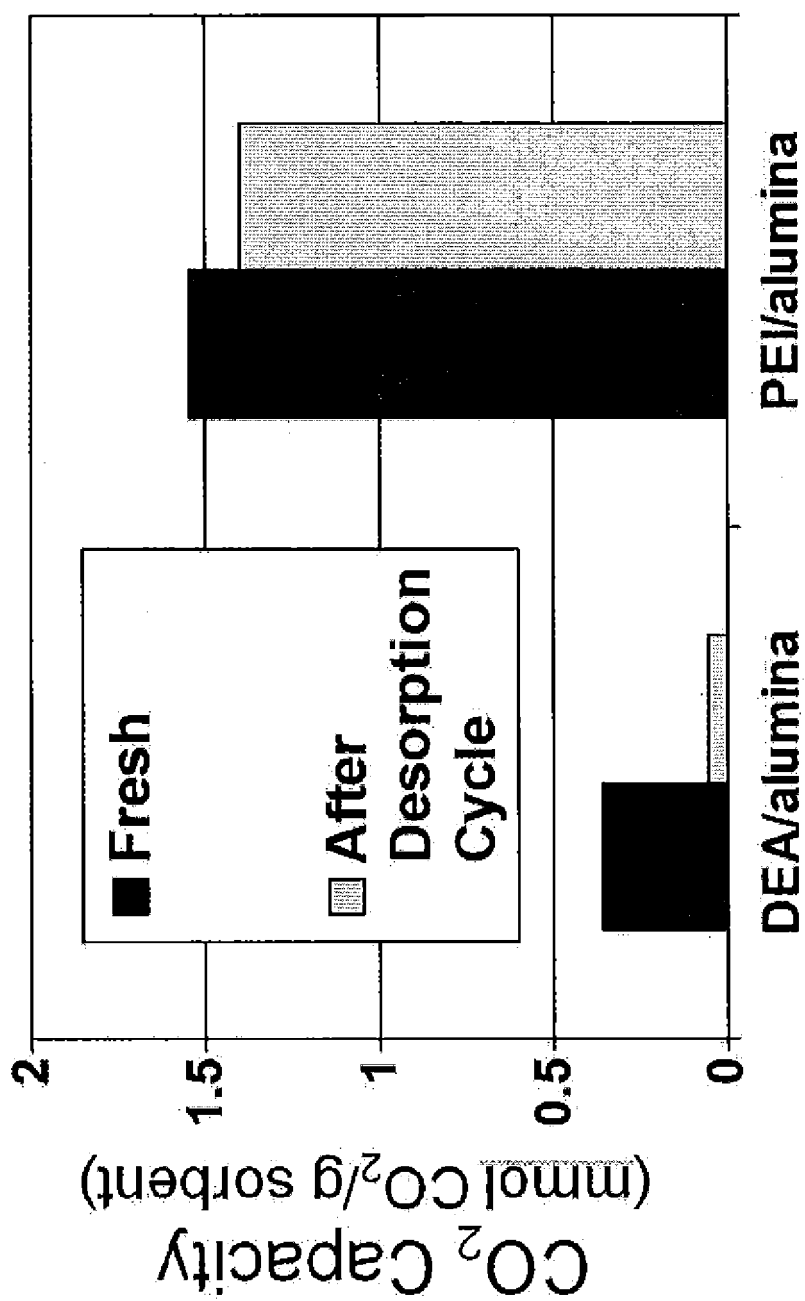


FIG. 9

