

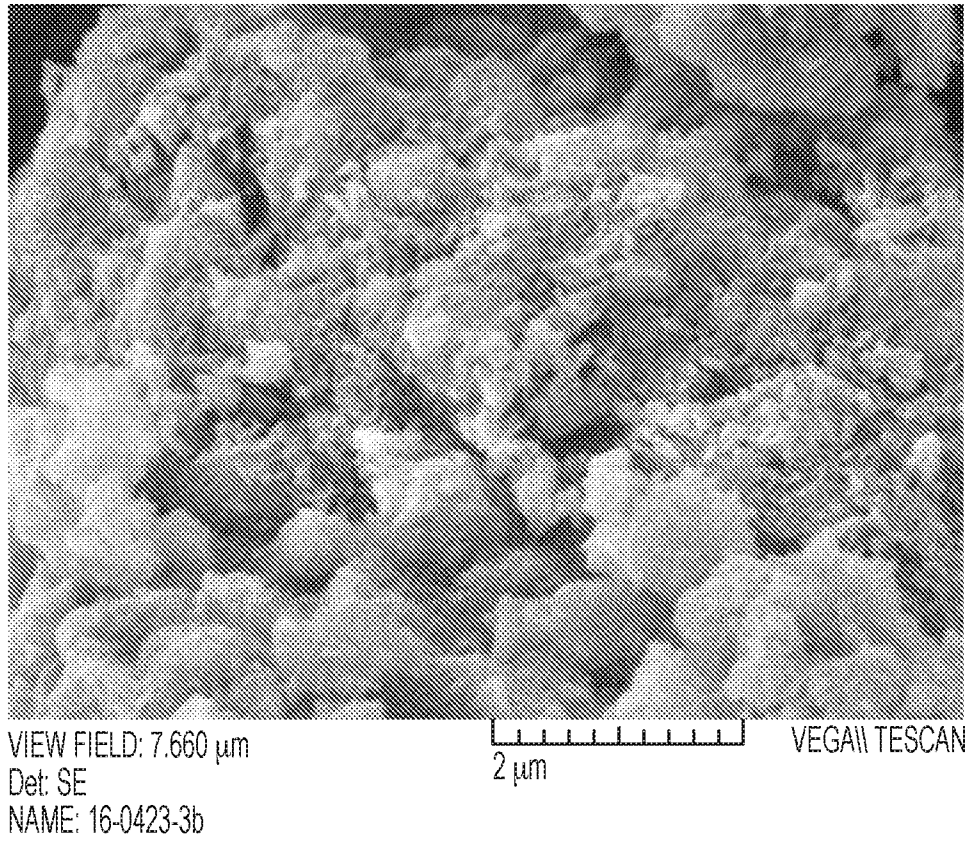


FIG. 1

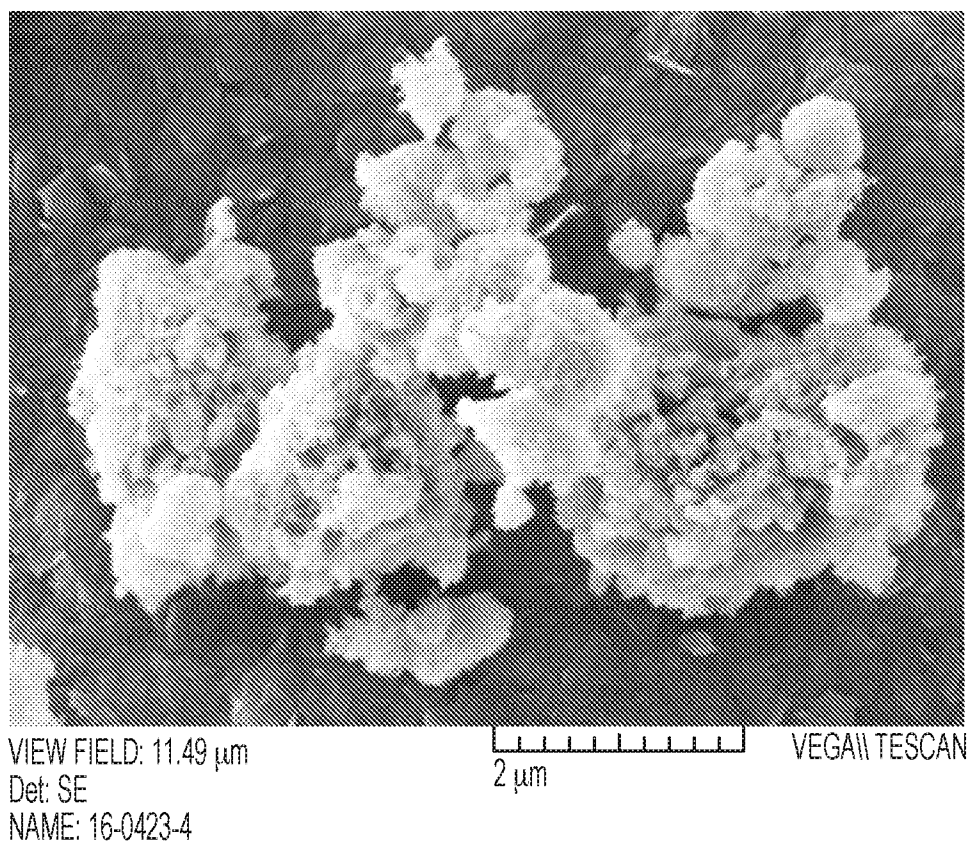


FIG. 2

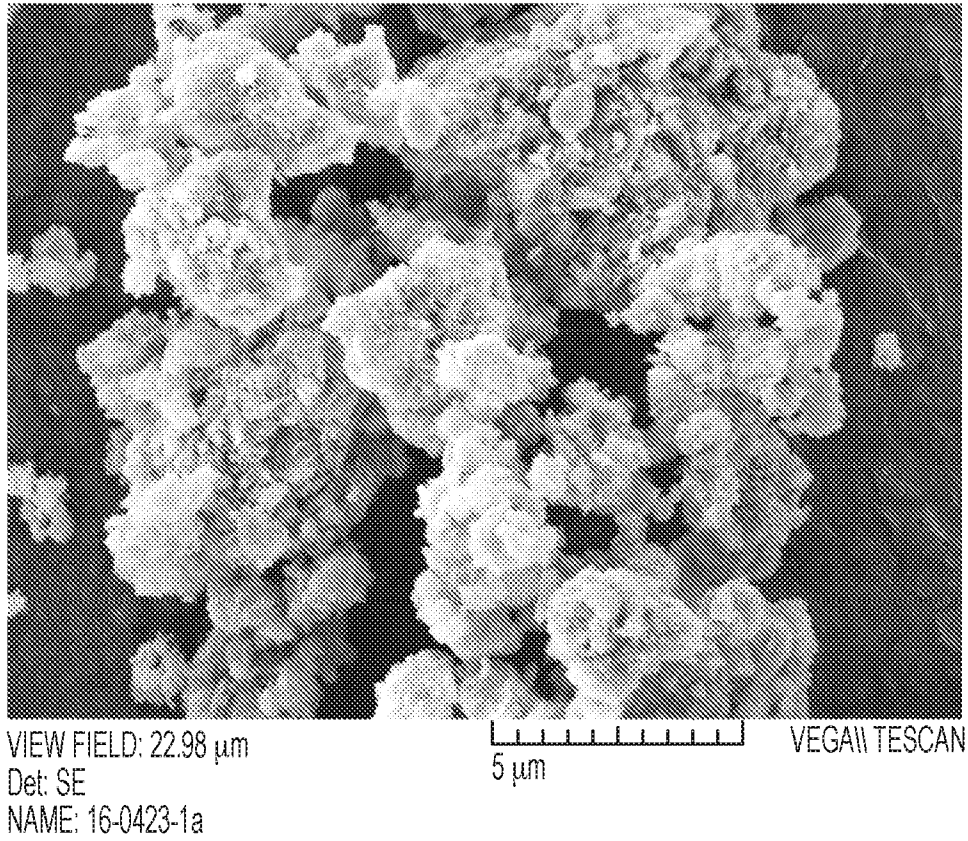


FIG. 3

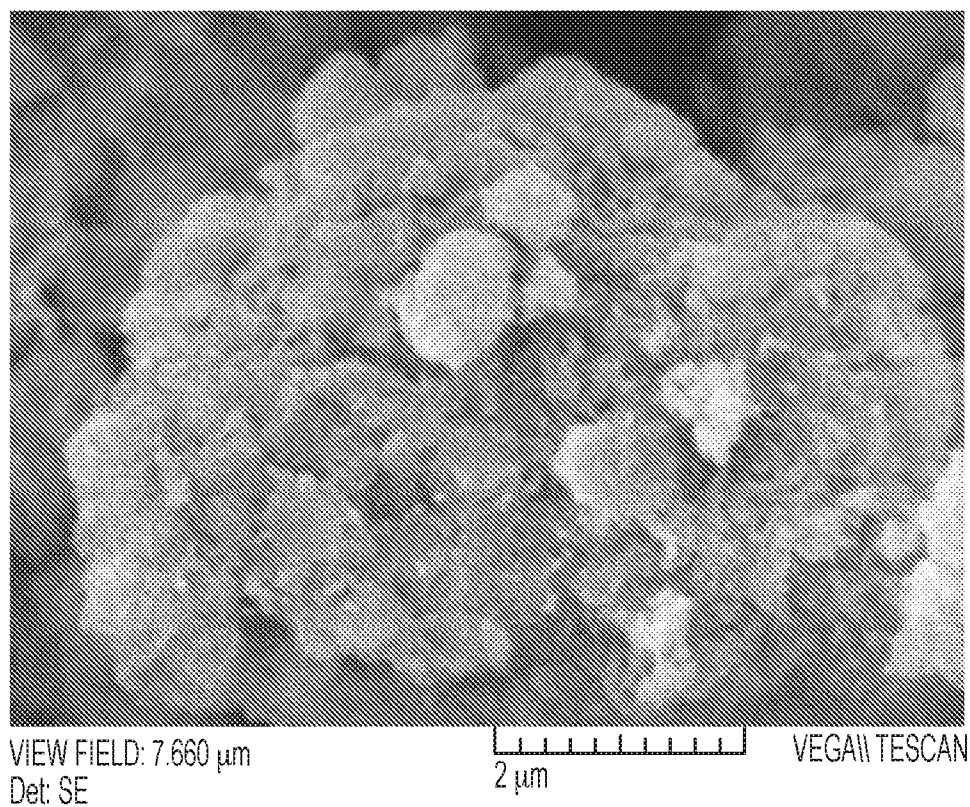


FIG. 4

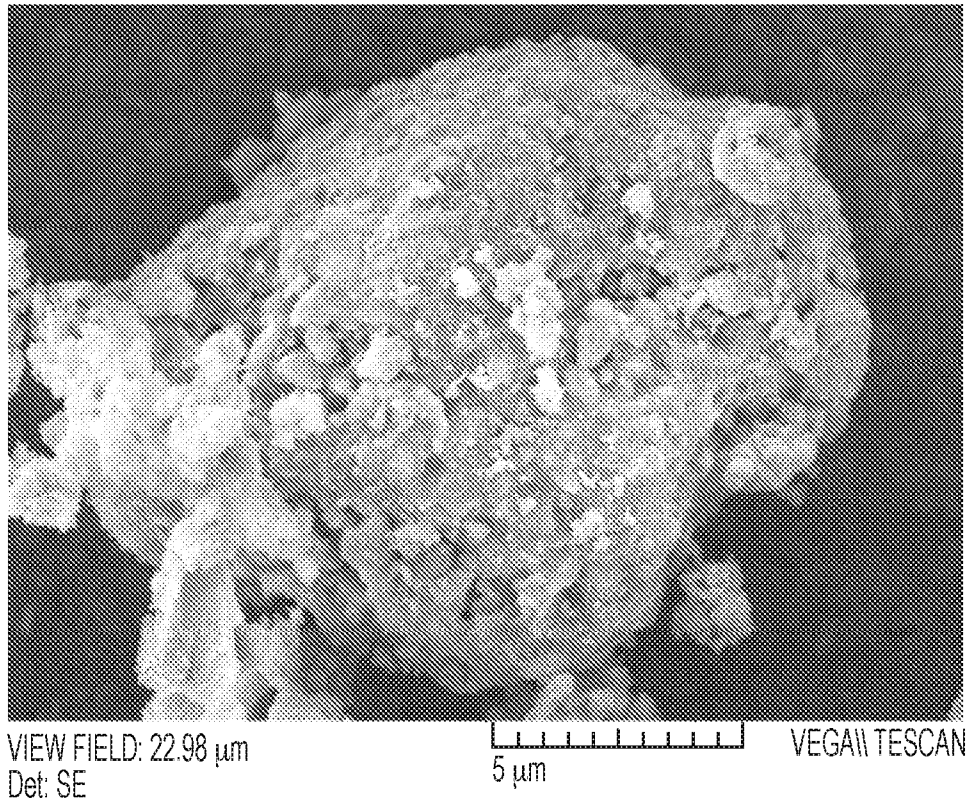


FIG. 5

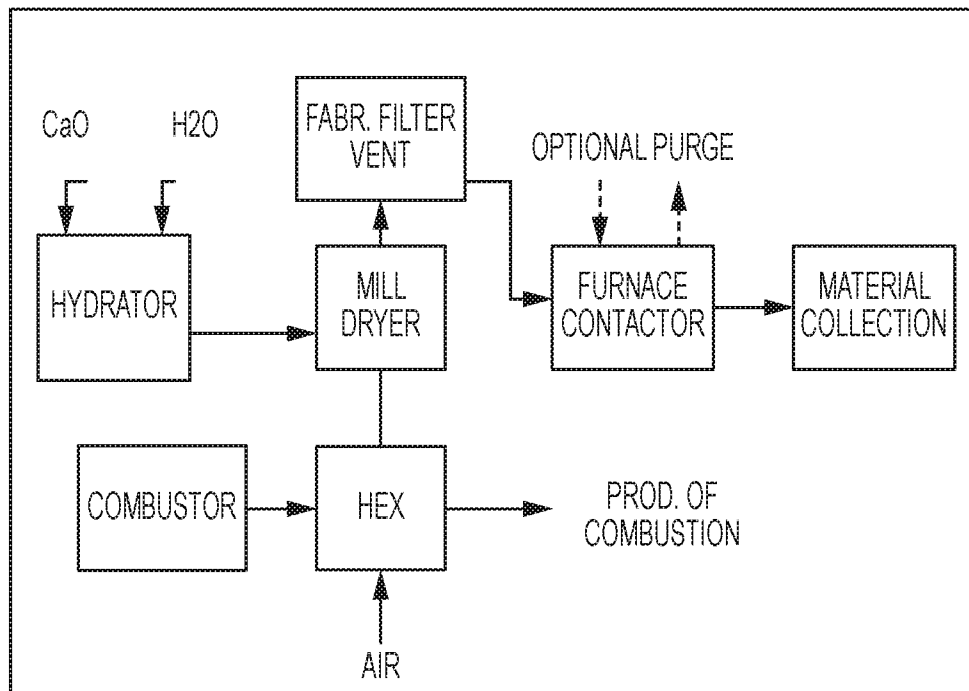


FIG. 6

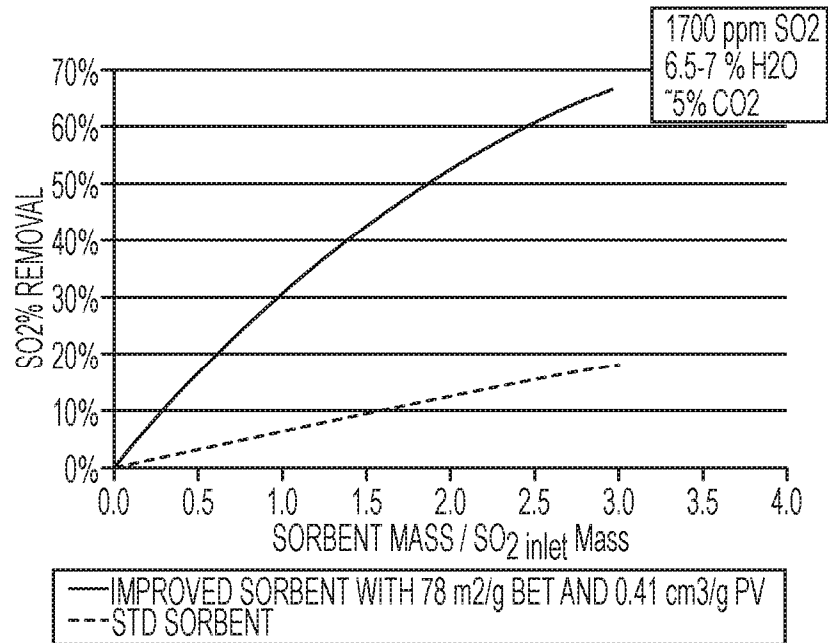


FIG. 7

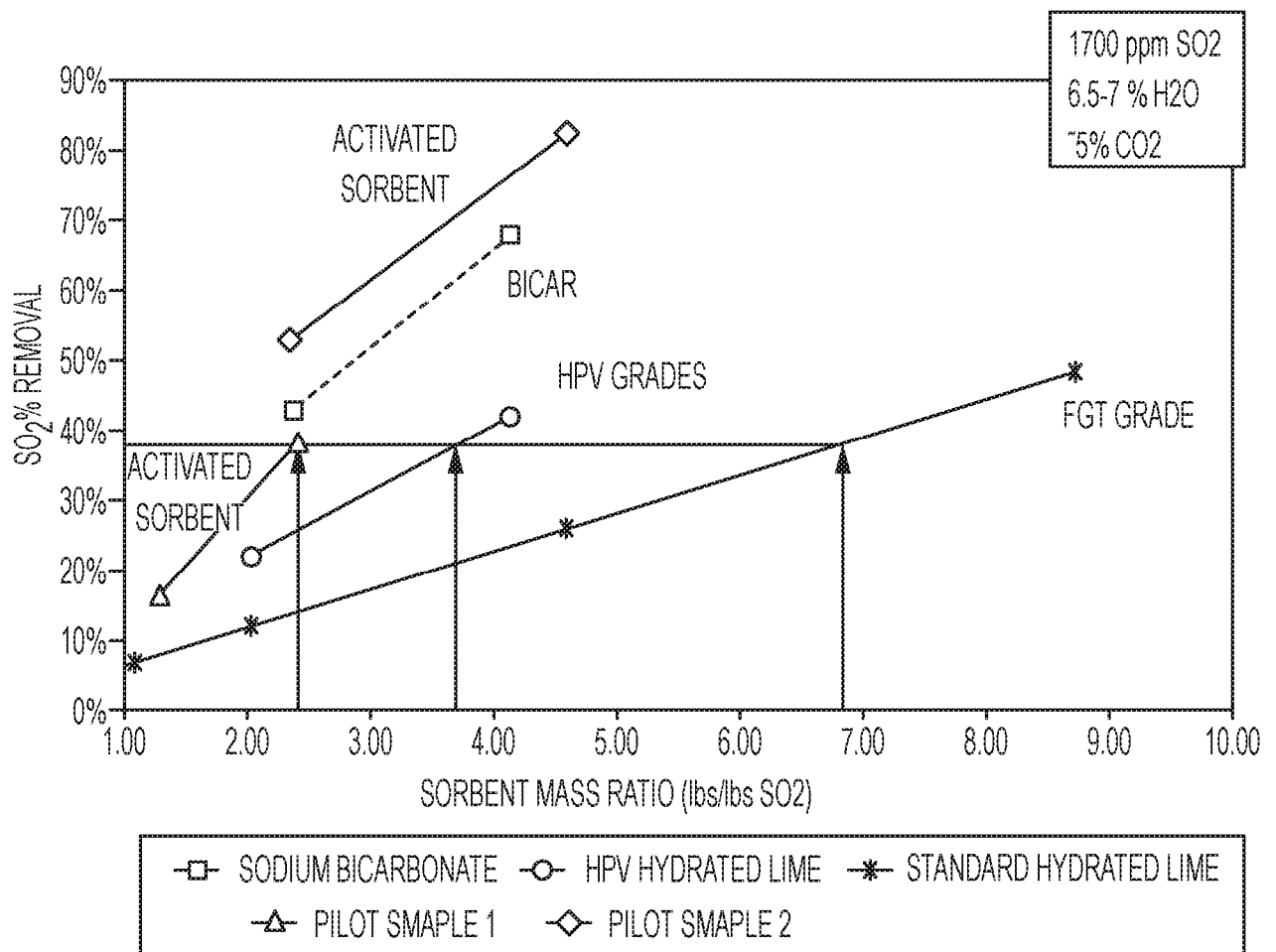
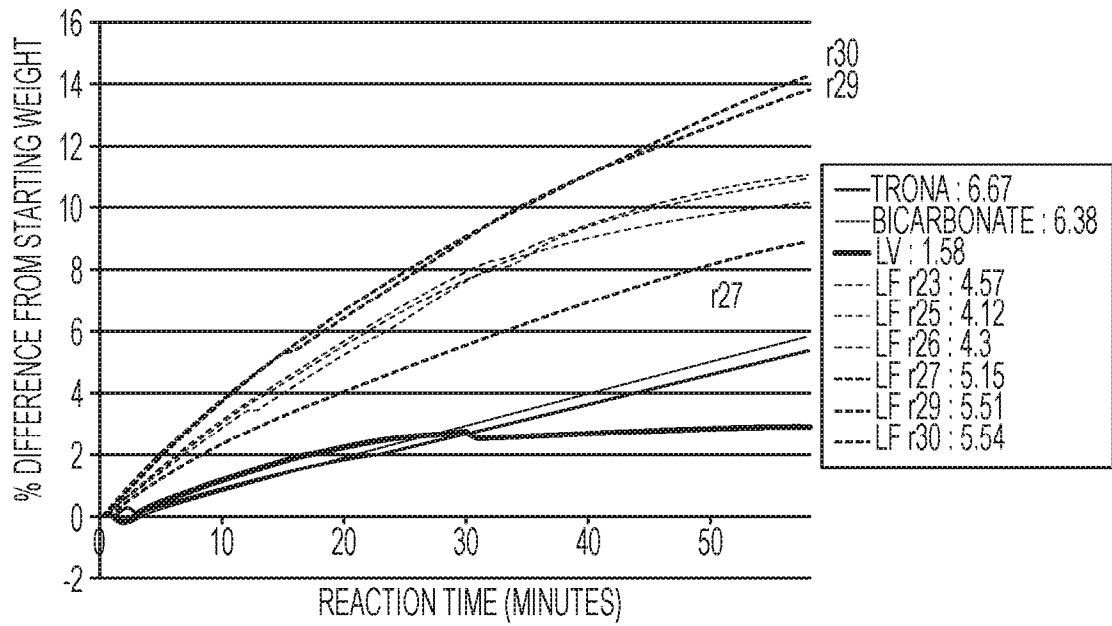
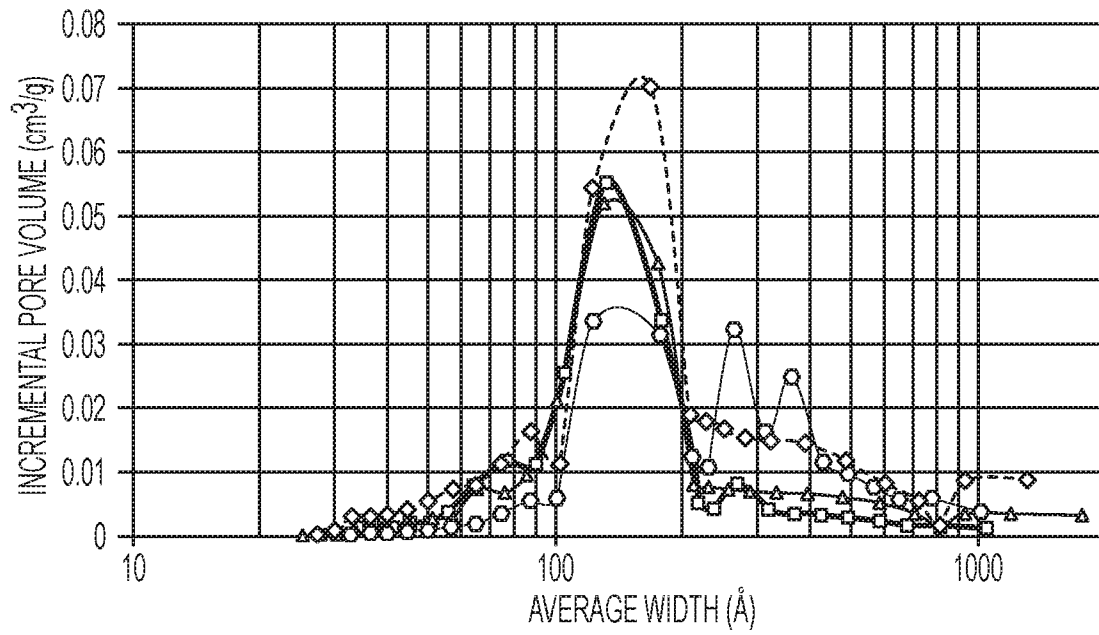


FIG. 8



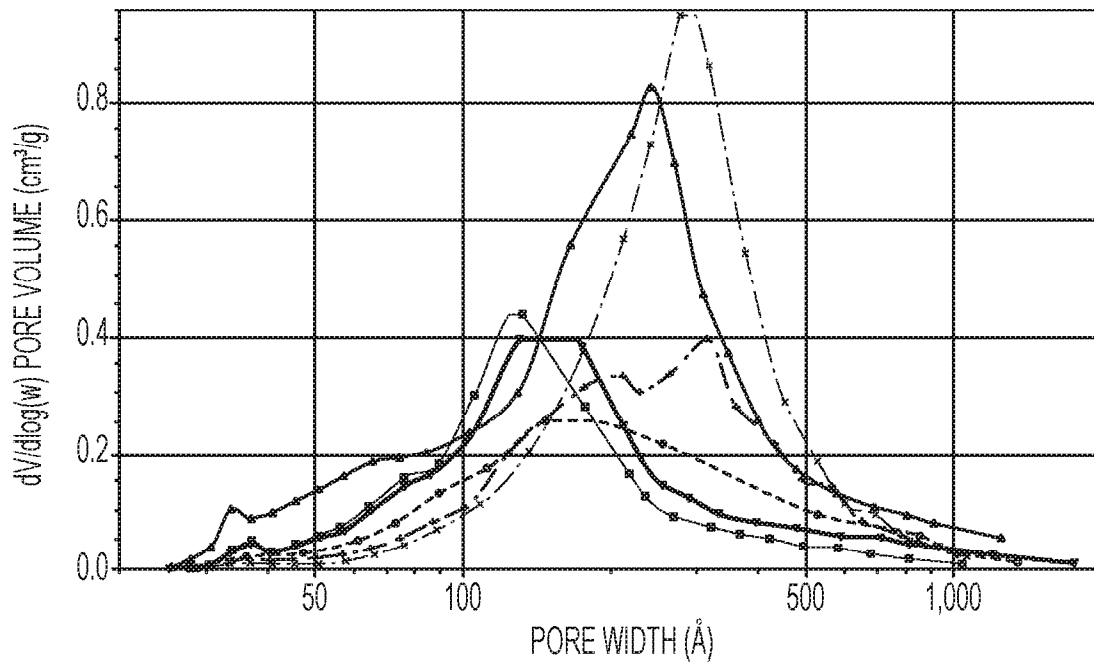
Spl	TEMP °F	TIME (min)	% CALCINED (TGA)	SSA	PV
CONVENTIONAL ACTIVATED STANDARD HYDRATE					
R23	406	85	86.99	59.38	0.178
R25	401	82	92.63	60.92	0.185
R26	397	90	93.31	60.89	0.192
COMPOSITIONS OF PRESENT INVENTIONS					
R27	396	90	40.50	73.72	0.316
R29	409	120	62.99	84.42	0.377
R30	410	180	81.52	82.42	0.383

FIG. 9



SAMPLE NAME	BET (M ² /g)	PV TO ~1200 Å (cm ³ /g)	PORE VOL. ~100-400 Å
—○— COMPETITOR HPV - EU	36.5	0.219	0.160
—□— CARMEUSE HPV - UNMILLED	50.8	0.196	0.140
—△— CARMEUSE HPV - MILLED	51.5	0.209	0.155
-◇- HPV ACTIVATED	73.2	0.318	0.234

FIG. 10



SAMPLE NAME	BET SSA (M ² /g)	PV TO ~1200 Å (cm ³ /g)	PV TO ~100-400 Å (cm ³ /g)
--○-- COMPETITOR HPV US	37.3	0.190	0.185
→-- COMPETITOR HPV EU	36.5	0.224	0.167
--□-- CARMEUSE HPV UNMILLED	50.8	0.196	0.140
→□ CARMEUSE HPV MILLED	51.5	0.209	0.155
→△ HPV ACTIVATED #1	49.8	0.355	0.298
→△ HPV ACTIVATED #2	89.5	0.404	0.226

FIG. 11