

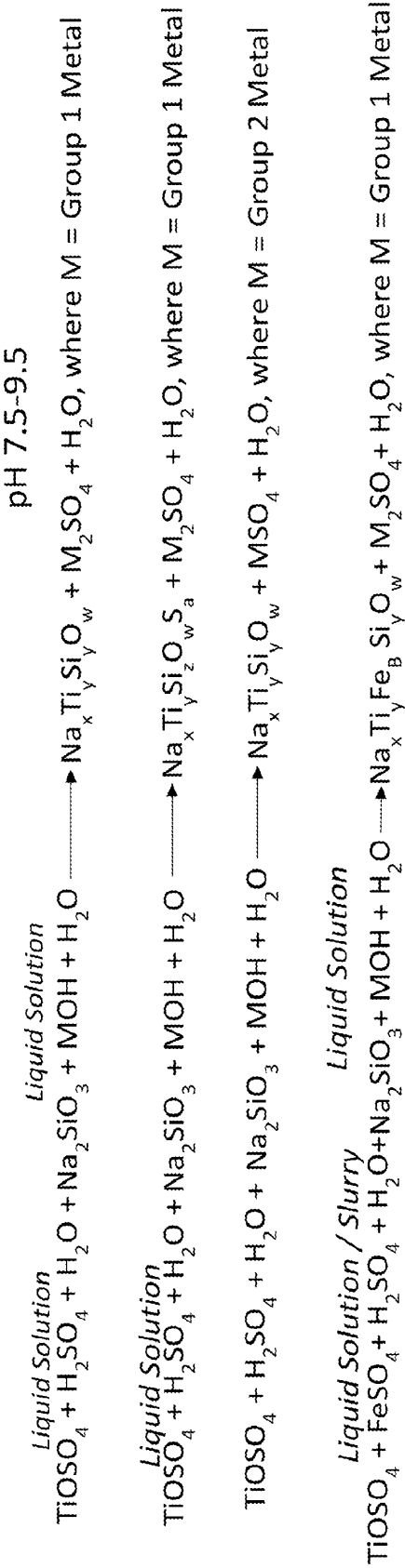


FIG. 1

Compound		Capacity	
		for Pb mg/g	general mol Pb/mol Media
Na ₂ TiO ₃	Theoretical	1461	1
Na ₂ Ti ₃ O ₇	Theoretical	687	1
Na ₂ TiSiO ₅	Theoretical	1026	1
Na ₂ Ti ₂ Si ₂ O ₉	Theoretical	606	1
Na ₂ Ti ₃ Si ₃ O ₁₃	Theoretical	430	1
Embodiments	Measured @ 500 ppm	>280	
	Measured @ 500 ppm		
Prior Art	ppm	<280	

FIG. 2

Media	% Solubles	mg Pb/dry g Media @ 495 ppm Pb	Pb Removal (%)
Prior Art	3.9%	259.5	52%
Embodiment A	1.0%	305.2	62%
Embodiment B	4.8%	347.3	70%
Embodiment C	15.1%	445.9	90%

FIG. 3

Media	% Solubles	mg Hg/dry g Media @ 43.7 ppm Hg	Hg Removal (%)
Prior Art	3.9%	41.2	94%
Embodiment A	1.0%	39.8	91%
Embodiment B	4.8%	40.6	93%

FIG. 4

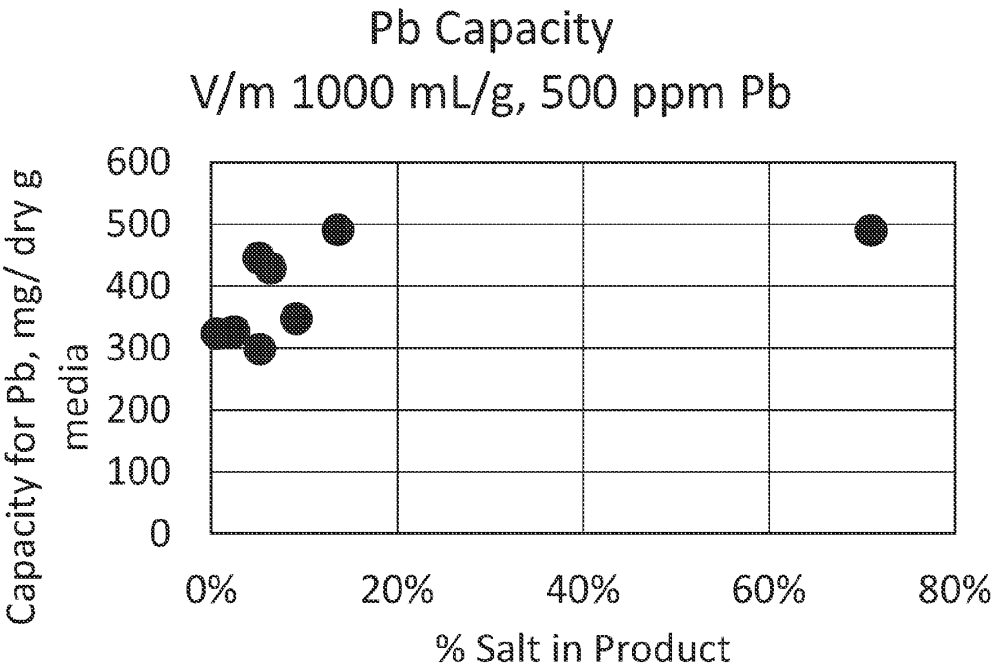


FIG. 5

	Capacity	
	Hg @ 50 ppm	Pb @ 500 ppm
	mg/g	mg/g
Black Liquor Embodiment D	46	321
Prior Art	48	269
Embodiment E w/o Fe	48	320

FIG. 6

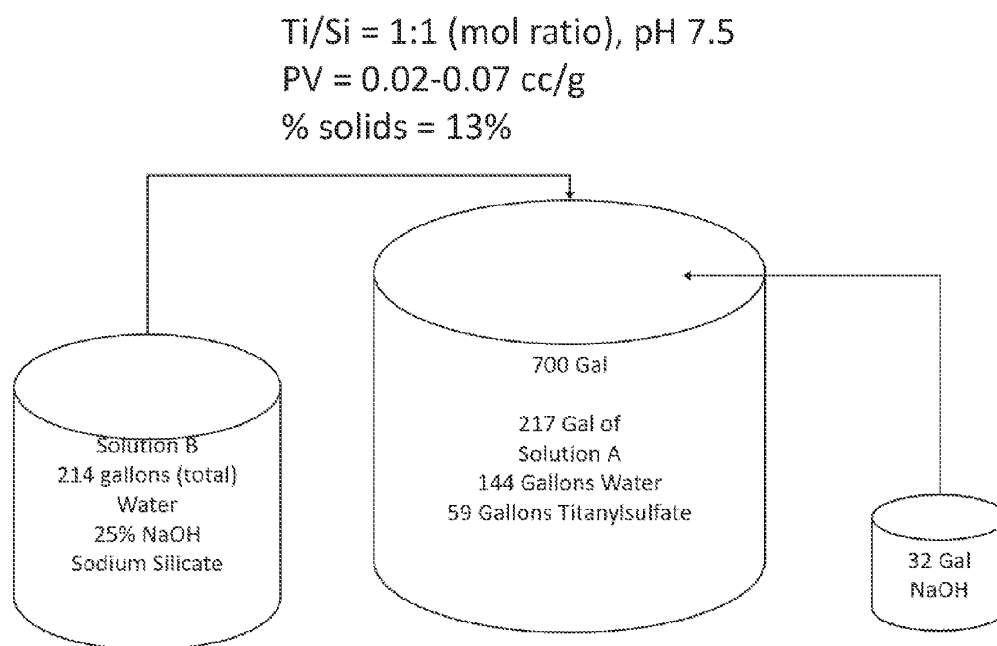


FIG. 7