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(71) Applicant: GRAVER TECHNOLOGIES LLC [US/US];
200 Lake Drive, Glasgow, DE 19702 (US).

(72) Inventors: MERTZ, Joshua; 1011 West Founds Street,
Townsend, DE 19734 (US). KRONFELD, Alexander; 8
Augusta Loop, North East, MD 21901 (US). HARRIS,
Bridgett; 406 North Street, Elkton, MD 21921 (US).

(74) Agent: CURCIO, Robert et al.; Delio Peterson & Curcio
LLC, 700 State Street, Suite 402, New Haven, CT 06511
(US).

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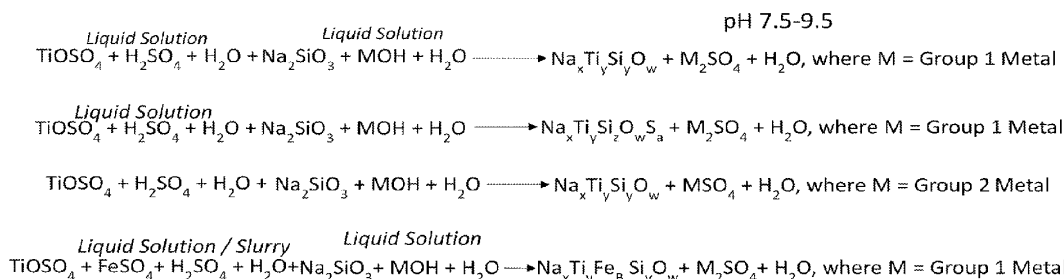


FIG. 1

(57) Abstract: A sorption media with a high capacity to remove heavy metals, lead, and mercury, in particular when synthesized from a titanium source that contains sulfur, such as black liquor or titanyl sulfate (TiOSO₄). The use of sulfur provides a higher than expected capacity for Pb and/or Hg. A Group 1 and/or Group 2 metal-titanosilicate is employed, having a Ti to Si molar ratio of 0.5-2, a pore volume of at least less than or equal to 0.25 cc/g.

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