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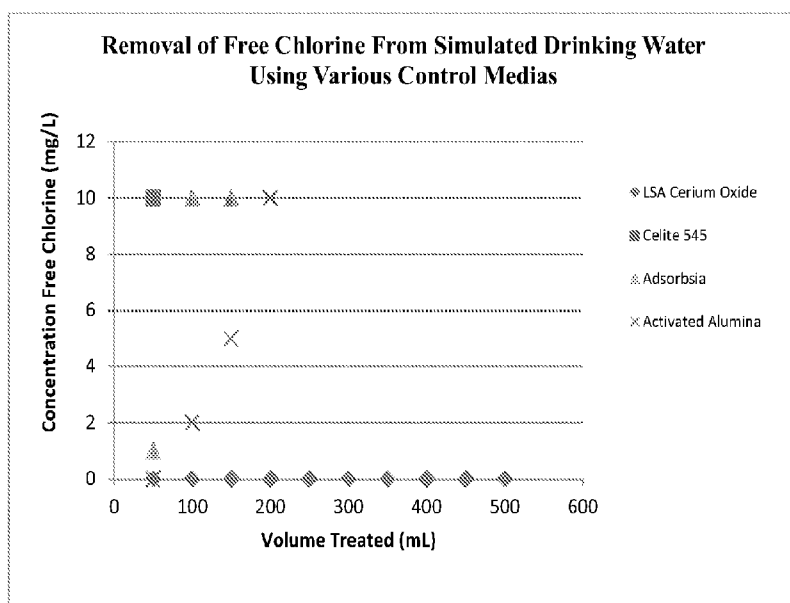
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(54) Title: NON-METAL-CONTAINING OXYANION REMOVAL FROM WATERS USING RARE EARTHS

**FIG. 3**

(57) Abstract: The present disclosure is directed to the use of rare earth-containing additives, particularly rare earth-containing additives comprising rare earths of plural oxidation states, to remove non-metal-containing oxyanions.



UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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A. CLASSIFICATION OF SUBJECT MATTER

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USPC - 210/638; 252/154

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

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Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

Google Scholar, Google Patents, PubWEST (PGPB,USPT,EPAB,JPAB) (Water, treatment, remove, oxyanion, hypochlorous, hypobromous, chlorite, bromite, iodate, sulfur, chlorine, bromine, iodine, halogen, cerium, oxide, water, soluble, electrolyze, aerate)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2010/0155330 A1 (Burba, et al.) 24 Jun 2010 (24.06.2010) paragraphs [0037]-[0038], [0047], [0088]-[0090]-[0101], [0139]-[0141]	1-18, 20-31
Y		19, 32-36
Y	US 2003/0024879 A1 (Carson, et al.) 06 Feb 2003 (06.02.2003) Figure 1, paragraph [0078], [0085]-[0086], [0095]	19, 32-36

☐ Further documents are listed in the continuation of Box C.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

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"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

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