## (11) **EP 1 736 236 A8**

## (12) CORRECTED EUROPEAN PATENT APPLICATION

published in accordance with Art. 158(3) EPC Note: Bibliography reflects the latest situation

(15) Correction information:

Corrected version no 1 (W1 A1) INID code(s) 84

(48) Corrigendum issued on: **04.04.2007 Bulletin 2007/14** 

(43) Date of publication: **27.12.2006 Bulletin 2006/52** 

(21) Application number: 04770926.6

(22) Date of filing: 26.07.2004

(51) Int Cl.: **B01J 20/06** (2006.01) **C02F 1/28** (2006.01)

(86) International application number: **PCT/JP2004/010615** 

(87) International publication number: WO 2006/011191 (02.02.2006 Gazette 2006/05)

(84) Designated Contracting States:

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

- (71) Applicant: Kurita Water Industries Ltd. Shinjuku-ku, Tokyo 160-8383 (JP)
- (72) Inventors:
  - NAKANO, Tadashi, c/o KURITA WATER INDUSTRIES LTD. Shinjuku-ku, Tokyo 160-8383 (JP)

- KAWAKATSU, Takahiro KURITA WATER INDUSTRIES LTD. Shinjuku-ku, Tokyo 160-8383 (JP)
- KUWANO, Hiroaki, c/o KURITA WATER INDUSTRIES LTD. Shinjuku-ku, Tokyo 160-8383 (JP)
- (74) Representative: Albrecht, Thomas et al Kraus & Weisert, Thomas-Wimmer-Ring 15 80539 München (DE)

## (54) ANION ADSORBENT, PROCESS FOR PRODUCING THE SAME AND METHOD OF WATER TREATMENT

(57) An anion absorbent comprising sintered clay of porous structure and a rare earth compound supported on the sintered clay. The anion absorbent is produced by a production method of an anion absorbent comprising a mixing step of mixing clay with an additive for making the clay porous, a sintering step of sintering a mixture obtained in the mixing step, and a supporting step of supporting a rare earth compound on the clay before the mixing step and/or on a sintered matter after the sintering

step. A water treatment method comprising a step of bringing the anion absorbent into contact with water to be treated at a predetermined pH so as to absorb and thus remove anions in the water to be treated, and a step of bringing the absorbent, which absorbed anions, into contact with solution having pH, which is different from the aforementioned predetermined pH, so as to desorb anions from the absorbent.