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(54) Title: METHOD OF INCREASING PH OF HIGH-DENSITY BRINES

(57) Abstract: It has been discovered that carbonate powders and bicarbonate powders are useful to increase the pH and corrosion resistance of high- density brines, such as zinc bromide brines, without significantly reducing their densities. The carbonates and/or bicarbonates should be water-soluble and may be sodium, potassium, magnesium and/or ammonium carbonates and/or bicarbonates and the like. The carbonates and/or bicarbonates are easily added in powder or other finely divided solid form and are completely dissolved in the brine prior to pumping the brine into a subterranean formation.

INTERNATIONAL SEARCH REPORT

International application No.
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A. CLASSIFICATION OF SUBJECT MATTER

C09K 15/02(2006.01)i, C09K 15/04(2006.01)i, C09K 8/58(2006.01)i, C09K 3/00(2006.01)i

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)

C09K; E21B

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

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

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

eKOMPASS(KIPO internal) & Keywords: brine, subterranean, zinc, bromide, carbonate, bicarbonate, corrosion, pH, formate.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 03-006572 A1 (BAKER HUGHES INCORPORATED) 23 January 2003 See the whole document.	1-13
A	US 6019903 A (GALLUP, DARRELL L.) 01 February 2000 See the whole document.	1-13
A	WO 2007-093987 A1 (BROMINE COMPOUNDS LTD.) 23 August 2007 See the whole document.	1-13

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

☒ See patent family annex.

* 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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"P" document published prior to the international filing date but later than the priority date claimed

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"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
31 JULY 2012 (31.07.2012)	**31 JULY 2012 (31.07.2012)**

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INTERNATIONAL SEARCH REPORT

Information on patent family members

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