

Title (en)
THE USE OF DICARBONYL COMPOUNDS TO INCREASE THE TEMPERATURE STABILITY OF BIOPOLYMERS DURING CRUDE OIL AND NATURAL GAS EXPLORATION

Title (de)
VERWENDUNG VON DICARBONYL-VERBINDUNGEN ZUR ERHÖHUNG DER TEMPERATURSTABILITÄT VON BIOPOLYMEREN BEI DER ERDÖL- UND ERDGASEXPLORATION

Title (fr)
UTILISATION DE COMPOSÉS DICARBONYLE POUR AUGMENTER LA STABILITÉ À LA TEMPÉRATURE DES BIOPOLYMÈRES DANS L'EXPLORATION DE PÉTROLE BRUT ET DE GAZ NATUREL

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Application
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Abstract (en)
[origin: US2007287638A1] The use of dicarbonyl compounds for increasing the thermal stability of biopolymers in aqueous liquid phases in petroleum and natural gas exploration is claimed. The biopolymer component preferably comprises polysaccharides prepared by fermentation, such as, for example, scleroglucan or welan gum. The aqueous liquid phase is typically a drilling fluid which may also contain high salt concentrations ("brines"). Glyoxal may be mentioned as a particularly suitable member of the dicarbonyls. It can either be admixed with the liquid phase or preferably also be incorporated in the course of the preparation of the biopolymer. The use according to the invention shows their advantages, particularly at temperatures in the rock formation which are above 250° Fahrenheit.

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