



(22) Date de dépôt/Filing Date: 1993/01/28

(41) Mise à la disp. pub./Open to Public Insp.: 1993/10/11

(45) Date de délivrance/Issue Date: 2004/08/03

(30) Priorité/Priority: 1992/04/10 (07/866,845) US

(51) Cl.Int.⁵/Int.Cl.⁵ C09K 7/02

(72) Inventeurs/Inventors:
PATEL, ARVIND D., US;
MCLAURINE, HENRY C., US

(73) Propriétaire/Owner:
M-I L.L.C., US

(74) Agent: FINLAYSON & SINGLEHURST

(54) Titre : ADDITIF POUR FLUIDE DE FORAGE ET METHODE POUR FAVORISER L'HYDRATATION

(54) Title: DRILLING FLUID ADDITIVE AND METHOD FOR INHIBITING HYDRATION

(57) **Abrégé/Abstract:**

This invention relates to drilling fluid additives that suppress clay swelling within a subterranean well and to methods for controlling clay swelling during the drilling of a subterranean well. A trihydroxy alkyl amine is reacted with an alkyl halide or a water soluble quaternary amine to form a quaternized trihydroxy alkyl amine. The reaction products can also include condensed reaction products of quaternized trihydroxy alkyl amines. The quaternized reaction products are characterized by low toxicity and compatibility with anionic drilling fluid components. The products are added to water base drilling fluids which are circulated throughout a well. The drilling fluid additives and the method of controlling clay swelling provide for improved control of the rheological properties of drilling fluids along with increased environmental and drilling fluid compatibility.

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DRILLING FLUID ADDITIVE AND
METHOD FOR INHIBITING HYDRATION

ABSTRACT

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