

Title (en)
METHOD FOR STIMULATING HYDROCARBON PRODUCTION AND REDUCING THE PRODUCTION OF WATER FROM A SUBTERRANEAN FORMATION

Title (de)
VERFAHREN ZUR STIMULATION DER ERDÖLGEWINNUNG UND ZUR VERRINGERUNG DER WASSERGEWINNUNG VON UNTERIRDISCHEN LAGERSTÄTTEN

Title (fr)
PROCEDE DE STIMULATION DE LA PRODUCTION D'HYDROCARBURE ET DE REDUCTION DE LA PRODUCTION D'EAU A PARTIR D'UNE FORMATION SOUTERRAINE

Publication
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Application
EP 04732656 A 20040513

Priority
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• US 44033703 A 20030516

Abstract (en)
[origin: US2004229756A1] Improved methods and solutions for treating water and hydrocarbon producing subterranean formations to reduce the water permeability thereof are provided. The improved aqueous solutions comprise a hydrophilic reactive polymer, a hydrophobic compound capable of reacting with the polymer in situ and a surfactant. The methods basically comprise preparing and introducing into the formation the aqueous solution followed by shutting in the formation in order to permit reaction of the polymer and the hydrophobic compound. The reaction product attaches to adsorption sites on surfaces within the porosity of the formation and reduces the water permeability thereof without substantially reducing the hydrocarbon permeability thereof. Additionally, the current invention provides a pre-reacted hydrophobically modified relative permeability modifier and formation stimulation/re-stimulation methods for using the same.

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