

Title (en)
METHOD FOR MAKING A QUASI-INCOMPRESSIBLE PHASE-CHANGE MATERIAL, SHEAR-THINNED AND WITH LOW HEAT CONDUCTIVITY

Title (de)
VERFAHREN ZUR HERSTELLUNG EINES QUASI-INKOMPRESSIBLEN PHASENWECHSELMATERIALS, VERFLÜSSIGT MITTELS SCHERUNG UND MIT SCHWACHER THERMISCHER LEITFÄHIGKEIT

Title (fr)
PROCEDE DE FABRICATION D'UN MATERIAU A CHANGEMENT DE PHASE, QUASI-INCOMPRESSIBLE, FLUIDIFIE SOUS CISAILLEMENT ET A FAIBLE CONDUCTIVITE THERMIQUE

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Abstract (en)
[origin: WO02062918A1] The invention concerns a method comprising the combination of a phase-change material in liquid phase (PCM), a texturing agent selected to considerably reduce thermal convection and whereof the viscosity is reversibly reduced, under shearing; the resulting material having a gelled consistency in neutral state, and made flowable under shearing. The phase-change material consists of a mixture of chemical compounds of the family of alkanes: paraffin, waxes, fatty alcohols, fatty acids and the like and the texturing agent is a bulky polymer (hydrocarbon polymers, ester or ether polymers, nixed ester-hydrocarbon polymers) a ionomeric polymer or a di-, tri- or multiple block styrene copolymer (SBS: styrene-butadiene-styrene, SEBS: styrene-ethylene-butadiene-styrene). The invention is useful for thermal insulation of containers or pipes, and particularly for insulating hydrocarbon transmission line.

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