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**(54) Title (EN):** DELAYED-EXPANSION CEMENT AND CEMENTING OPERATIONS

**(54) Title (FR):** CIMENT À EXPANSION RETARDÉE ET OPÉRATIONS DE CIMENTATION

**(57) Abstract:**

**(EN):** A delayed-expansion cement mixture or slurry of hydraulic cement contains an expanding agent having hydrophobically modified surfaces with a hydrophobic and/or self-assembling film. A method to delay expansion of cement involves treating the expanding agent with a self-assembling film precursor compound, making the slurry with cement and water, and setting and expanding the cement. A cementing method places the mixture or slurry downhole where it is hardened and expanded.

**(FR):** La présente invention concerne un mélange de ciment ou une pâte de ciment hydraulique à expansion retardée comprenant un agent expansif présentant des surfaces modifiées en vue de les rendre hydrophobes au moyen d'un film hydrophobe et/ou un film à auto-assemblage. L'invention décrit un procédé servant à retarder l'expansion de ciment consistant à traiter l'agent d'expansion au moyen d'un composé précurseur de film à auto-assemblage, à réaliser la pâte au moyen de ciment et d'eau, et à durcir et provoquer l'expansion du ciment. Le procédé de cimentation consiste à placer la pâte ou le mélange au fond d'un trou où il est durci et expansé.

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