Title (en)

MAGNETICALLY CONTROLLED RELEASE OF CHEMICALS IN A DOWNHOLE ENVIRONMENT

Title (de)

MAGNETISCH GESTEUERTE FREISETZUNG VON CHEMIKALIEN IN EINER BOHRLOCHUMGEBUNG

Title (fr)

LIBÉRATION COMMANDÉE MAGNÉTIQUEMENT DE PRODUITS CHIMIQUES DANS UN ENVIRONNEMENT DE FOND DE TROU

Publication

EP 4409105 A1 20240807 (EN)

Application

EP 22840446 A 20221127

Priority

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- US 2022051026 W 20221127

Abstract (en)

[origin: WO2023101893A1] A method for on demand release of a downhole chemical comprising the steps of extending a drillstring into a wellbore of a subterranean well from a terranean surface comprising an actuator assembly and a modified stabilizer; identifying a downhole issue in the wellbore; activating the actuator assembly to transmit a signal to turn on the electromagnet of the modified stabilizer; creating a magnetic field when the electromagnet is turned on by the actuator assembly; opening the magnetically-actuated door due to the magnetically-actuated door being physically attracted to the magnetic field of the electromagnet; releasing downhole chemicals from the chemical storage compartment through the magnetically-actuated door; activating the actuator assembly to transmit a signal to turn off the electromagnet of the modified stabilizer; removing the magnetic field when the electromagnet is turned off by the actuator assembly; and closing the magnetically-actuated door when the magnetic field is removed.

IPC 8 full level

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