

Title (en)
DOWNHOLE USES OF PIEZOELECTRIC MOTORS

Title (de)
VERWENDUNGEN PIEZOELEKTRISCHER MOTOREN IN BOHRLÖCHERN

Title (fr)
UTILISATIONS DE MOTEURS PIEZOELECTRIQUES DANS DES CONDITIONS DE FOND

Publication
EP 1856412 A2 20071121 (EN)

Application
EP 06736700 A 20060302

Priority
• US 2006007425 W 20060302
• US 7412405 A 20050307

Abstract (en)
[origin: US2006198742A1] A sampling system used in collecting samples of connate fluid from within hydrocarbon bearing formations. The sampling system comprises a sonde disposed within a wellbore formed proximate to the formation of interest. The sonde includes a sample probe insertable into the formation and a drawdown pump in fluid communication with the sample probe. The drawdown pump is motivated by an associated electrically responsive material, where the electrically responsive material can be comprised of a piezoelectric material, a electroactive polymer, or some other electrically responsive material.

IPC 8 full level
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CPC (source: EP US)
E21B 49/087 (2013.01 - EP US); **E21B 49/10** (2013.01 - EP US)

Citation (search report)
See references of WO 2006096452A2

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DE FR GB

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DOCDB simple family (publication)
US 2006198742 A1 20060907; CA 2600032 A1 20060914; CN 100572801 C 20091223; CN 101137844 A 20080305; EA 011817 B1 20090630; EA 200701812 A1 20080228; EP 1856412 A2 20071121; JP 2008537577 A 20080918; WO 2006096452 A2 20060914; WO 2006096452 A3 20070726

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US 7412405 A 20050307; CA 2600032 A 20060302; CN 200680007546 A 20060302; EA 200701812 A 20060302; EP 06736700 A 20060302; JP 2008500765 A 20060302; US 2006007425 W 20060302