

Title (en)  
Remote actuation of downhole tools using fluid pressure from surface

Title (de)  
Fernbetätigung von Bohrwerkzeugen mit Flüssigdruck von der Oberfläche

Title (fr)  
Actionnement à distance d'outils de forage utilisant une pression de fluide en surface

Publication  
**EP 2025861 A3 20101006 (EN)**

Application  
**EP 08252136 A 20080620**

Priority  
GB 0715970 A 20070816

Abstract (en)  
[origin: EP2025861A2] An apparatus for and a method of transmitting signals from the surface of a well to a location downhole in the well utilize a downhole fluid pressure sensor (52), a signal processing means (54; 56; 58) located downhole in electrical connection with the pressure sensor (52) and a downhole programmable logic unit (60) capable of counting at least two signals received by the downhole pressure sensor (52). Typically, signals transmitted from the surface comprise a peak in pressure of downhole fluid located in production tubing run into a well bore and these signals are sensed by the downhole fluid pressure sensor (52). The logic unit (60) outputs a signal to a tool to be actuated if it receives a number of signals within a particular time period, wherein the logic unit (60) actuates the tool by the frequency of signals received rather than the amplitude of the signals received.

IPC 8 full level  
**E21B 34/10** (2006.01); **E21B 47/18** (2012.01)

CPC (source: EP US)  
**E21B 34/10** (2013.01 - EP US); **E21B 47/18** (2013.01 - EP US)

Citation (search report)  
• [X] WO 9624752 A2 19960815 - BAKER HUGHES INC [US]  
• [X] WO 9954591 A1 19991028 - SCHLUMBERGER TECHNOLOGY CORP [US]

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)  
AL BA MK RS

DOCDB simple family (publication)  
**EP 2025861 A2 20090218; EP 2025861 A3 20101006**; AU 2008202761 A1 20090305; BR PI0803502 A2 20091006; CA 2635306 A1 20090216;  
GB 0715970 D0 20070926; US 2009044937 A1 20090219

DOCDB simple family (application)  
**EP 08252136 A 20080620**; AU 2008202761 A 20080623; BR PI0803502 A 20080731; CA 2635306 A 20080619; GB 0715970 A 20070816;  
US 22199908 A 20080808