

Title (en)  
APPARATUS FOR WELL LOGGING WHILE DRILLING.

Title (de)  
EINRICHTUNG FÜR BOHRLOCHMESSUNGEN WÄHREND DES BOHRENS.

Title (fr)  
APPAREIL DE RADIOCAROTTAGE PENDANT LE FORAGE.

Publication  
**EP 0087418 A4 19850626 (EN)**

Application  
**EP 81902875 A 19811002**

Priority  
US 30244681 A 19810915

Abstract (en)  
[origin: WO8301087A1] A monostable, solenoid-operated valve in a passage which bypasses the drilling fluid pressure drop across a drill bit (34) at the lower end of a drill string (28) in a well opens and closes in response to downhole conditions to create pressure pulses in the drilling fluid. The valve (166) is urged toward a closed position by drilling fluid pumped through the drill string. A larger force is required to open the valve (166) than to hold it open. Current supplied to the solenoid (67, 70) to open the valve is thereafter reduced to a value sufficient to hold the valve open. The solenoid is de-energized to close the valve.

IPC 1-7  
**E21B 47/00**

IPC 8 full level  
**E21B 21/10** (2006.01); **E21B 47/00** (2006.01); **E21B 47/18** (2006.01)

CPC (source: EP)  
**E21B 21/103** (2013.01); **E21B 47/18** (2013.01); **E21B 47/22** (2020.05)

Citation (search report)  
• [XD] WO 8002051 A1 19801002 - EXPLORATION LOGGING INC [US]  
• [X] GB 2009473 A 19790613 - GEARHART OWEN INDUSTRIES  
• [A] US 2964116 A 19601213 - PETERSON ELWIN W

Designated contracting state (EPC)  
DE FR NL

DOCDB simple family (publication)  
**WO 8301087 A1 19830331**; AU 548627 B2 19851219; AU 7724581 A 19830408; DK 214783 A 19830513; DK 214783 D0 19830513; EP 0087418 A1 19830907; EP 0087418 A4 19850626; GB 2114632 A 19830824; GB 2114632 B 19850515; GB 8309495 D0 19830511; NO 831701 L 19830513

DOCDB simple family (application)  
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