

Title (en)

Pump noise filtering apparatus for a borehole measurement while drilling system utilizing drilling fluid pressure sensing.

Title (de)

Pumpengeräuschfiltergerät für eine Bohrlochmessung während des Bohrens mittels Messung des Druckes der Bohrflüssigkeit.

Title (fr)

Dispositif de filtrage du bruit de la pompe pour un système de mesure pendant le forage d'un puits utilisant la détection de la pression du fluide de forage.

Publication

EP 0078907 A2 19830518 (EN)

Application

EP 82108793 A 19820923

Priority

US 31949881 A 19811109

Abstract (en)

An apparatus for removing pulsation noise caused by a well drilling fluid circulating pump from fluid pressure pulse transmitted measurement while drilling data passing through drilling fluid in a drill string of a borehole measurement while drilling system. The noise filtering apparatus includes a drilling fluid pressure sensor and an adaptive estimator that memorizes the pulse noise signature of a pump in synchronization with the pump's strokes. The memorized signature is removed from the signal data derived from pressure pulsations in the drilling fluid in order to remove or filter the pump's noise or pressure signal disturbing influence from this data. The adaptive estimator is arranged such that it will compensate for changing operating conditions of the pump so that this pump created noise is substantially, continuously filtered from the measurement while drilling data.

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CPC (source: EP)

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Cited by

EP0159314A4; FR2861800A1; GB2545865A; CN112554875A; EP0535729A3; GB2437209A; GB2437209B; GB2247905A; GB2247905B; GB2449196A; GB2449196B; NO20042651A; US10502052B2; US7577528B2; US7830749B2; WO2016093819A1; WO2006069060A1; US7198102B2; US7320370B2; US7380616B2; WO2007095153A1; WO2006001704A1

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