

Title (en)  
ACOUSTIC DATA TRANSMISSION THROUGH A DRILL STRING

Publication  
**EP 0408667 A4 19910814 (EN)**

Application  
**EP 89905949 A 19890421**

Priority  
US 18432688 A 19880421

Abstract (en)  
[origin: WO8910572A1] Acoustical signals are transmitted through a section of drill string (30) by cancelling upward moving acoustical noise and by preconditioning the data in recognition of the comb filter characteristics of the drill string. Spaced sensors (52, 54) provide a delayed signal to summer (46) which is combined with a signal from suitable circuitry (28) and then applied to sensors (42, 44) for transmitting an uphole signal having no downward moving noise.

IPC 1-7  
**G01V 1/40**

IPC 8 full level  
**G01V 1/40** (2006.01); **E21B 47/16** (2006.01)

CPC (source: EP)  
**E21B 47/16** (2013.01)

Citation (search report)

- [AD] US 4293936 A 19811006 - COX WILLIAM H, et al
- [AD] US 4562559 A 19851231 - SHARP H EUGENE [US], et al
- See references of WO 8910572A1

Cited by  
DE102010047568A1; US9982529B2

Designated contracting state (EPC)  
DE FR GB NL

DOCDB simple family (publication)  
**WO 8910572 A1 19891102**; DE 68912584 D1 19940303; EP 0408667 A1 19910123; EP 0408667 A4 19910814; EP 0408667 B1 19940119; JP H03501408 A 19910328

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**US 8901641 W 19890421**; DE 68912584 T 19890421; EP 89905949 A 19890421; JP 50585689 A 19890421