

Title (en)  
DOWNHOLE TOOL

Publication  
**EP 0183482 A3 19880720 (EN)**

Application  
**EP 85308446 A 19851120**

Priority  
• US 67602284 A 19841128  
• US 67613884 A 19841128

Abstract (en)  
[origin: EP0183482A2] A downhole tool apparatus has a housing (12) with a compression chamber (232) defined therein. A fill passage (234) is disposed through the housing for placing the compression chamber in open flow fluid communication with a well annulus (236) so that well fluid may flow into the compression chamber as the apparatus is lowered into a well. An isolation valve (242) selectively closes the fill passage to trap well fluid in the compression chamber. An operating element (162) is operated by an actuating piston (140) slidably disposed in the housing. A first side of the actuating piston is in fluid pressure communication with the compression chamber so that a volume of the compression chamber is decreased when the actuating piston moves between first and second position thereof relative to the housing. An injection passage (286) is preferably provided for injecting pressurized gas into the compression chamber at a location within the compression chamber such that the injected gas will directly contact at a gas-well fluid interface an upper surface of well fluid that flows into the compression chamber. The compression chamber is preferably primarily defined by an elongate diametrically irregular annular space, and the gas-well fluid interface moves upward past a number of irregular diameters of this diametrically irregular elongated space, as the apparatus is lowered into a well.

IPC 1-7  
**E21B 34/10**

IPC 8 full level  
**E21B 34/10** (2006.01); **E21B 49/00** (2006.01); **E21B 34/00** (2006.01)

CPC (source: EP)  
**E21B 34/108** (2013.01); **E21B 49/001** (2013.01); **E21B 2200/04** (2020.05)

Citation (search report)  
• [XD] US 3856085 A 19741224 - HOLDEN J, et al  
• [Y] US 4083409 A 19780411 - BARRINGTON BURCHUS Q  
• [XD] US 4444268 A 19840424 - BARRINGTON BURCHUS Q [US]  
• [XD] US 4341266 A 19820727 - CRAIG GENE C  
• [AD] US 3664415 A 19720523 - WRAY GARY Q, et al

Cited by  
GB2549679A; GB2549679B; GB2230802A; GB2230802B; US10619449B2; WO2016137329A1

Designated contracting state (EPC)  
DE FR GB IT NL

DOCDB simple family (publication)  
**EP 0183482 A2 19860604; EP 0183482 A3 19880720; EP 0183482 B1 19910130; DE 3581602 D1 19910307**

DOCDB simple family (application)  
**EP 85308446 A 19851120; DE 3581602 T 19851120**