

Title (en)  
Downhole safety valve

Title (de)  
Sicherheitsventil im Bohrlock

Title (fr)  
Vanne de sécurité de fond de puits

Publication  
**EP 1359289 A1 20031105 (EN)**

Application  
**EP 02075825 A 20020301**

Priority  
EP 02075825 A 20020301

Abstract (en)  
A downhole safety valve (1) for preventing blow outs in an oil or gas production well comprises a cup-shaped piston and cylinder assembly, a fluid inlet (8) connected to the interior (6) of the piston (2), a fluid outlet (10) connected to the exterior (7) of the cylinder (3) and e.g. a hydraulic system (20) for pushing the piston (2) down within the cylinder (3), wherein the piston and cylinder have perforated tubular walls and the perforations (4,5) are at least partly aligned if the piston (2) is pushed down into a lower position within the cylinder (3) , but which perforations (4,5) are unaligned such that flow of hydrocarbon fluid from the valve inlet (8) to the valve outlet (10) is interrupted if the piston (2) is pushed up within the cylinder (3) in response to an increase of the oil or gas pressure in the production tubing below the valve inlet (8). <IMAGE>

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

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

CPC (source: EP)  
**E21B 34/10** (2013.01)

Citation (search report)  
• [A] US 3814181 A 19740604 - YOUNG D  
• [A] US 4691778 A 19870908 - PYNE R DAVID G [US]  
• [A] US 5979572 A 19991109 - BOYD MARK [GB], et al

Cited by  
CN114704223A; US11891879B2; WO2020152478A1

Designated contracting state (EPC)  
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