

Title (en)  
PRESSURE RELIEF VALVE

Title (de)  
DRUCKENTLASTUNGSVENTIL

Title (fr)  
SOUPAPE DE SURPRESSION

Publication  
**EP 2425097 A2 20120307 (EN)**

Application  
**EP 10719100 A 20100421**

Priority  
• IB 2010051753 W 20100421  
• DE 202009004753 U 20090429

Abstract (en)  
[origin: WO2010125500A2] The invention relates to a pressure relief valves, especially a rock-burst safety valve for the hydraulic face support, having a consumer connection (3) with a bore (2) a fluid outlet (4), and a valve piston which is arranged in the valve and pressed against a valve seat (7) by means of a valve spring system (6) for separating consumer connection and fluid outlet. In order to improve the valve with regard to construction and functioning such that a rapid and reliable response behaviour for the opening and closing movements can be achieved, the valve seat (7), the bore (2) of the consumer connection (3) and the fluid outlet (4) are formed on a head piece (1) having a guide bore (24) for the valve piston (5). Furthermore, the valve spring system (6) has at least one disc spring stack (12) having disc springs (11) which are arranged in the valve housing (13), wherein the actuating force of the spring stacks is applied against an end of the valve piston (5) that is remote from the sealing seat (7).

IPC 8 full level  
**E21D 15/44** (2006.01); **E21D 15/46** (2006.01); **E21D 15/51** (2006.01); **E21D 23/16** (2006.01); **F16K 17/04** (2006.01)

CPC (source: EP)  
**E21D 15/44** (2013.01); **E21D 15/46** (2013.01); **E21D 15/465** (2013.01); **E21D 15/512** (2013.01); **E21D 23/16** (2013.01); **F16K 17/0493** (2013.01)

Citation (search report)  
See references of WO 2010125500A2

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)  
**DE 202009004753 U1 20100916**; AU 2010243223 A1 20111027; CN 102428253 A 20120425; CN 102428253 B 20150708;  
EP 2425097 A2 20120307; RU 2011148438 A 20130610; WO 2010125500 A2 20101104; WO 2010125500 A3 20101223;  
ZA 201108679 B 20120829

DOCDB simple family (application)  
**DE 202009004753 U 20090429**; AU 2010243223 A 20100421; CN 201080018708 A 20100421; EP 10719100 A 20100421;  
IB 2010051753 W 20100421; RU 2011148438 A 20100421; ZA 201108679 A 20111125