

Title (en)  
PRESSURE CONTROL VALVE

Title (de)  
DRUCKREGULIERVENTIL

Title (fr)  
VALVE DE REGULATION DE PRESSION

Publication  
**EP 1525144 B1 20051214 (DE)**

Application  
**EP 03761560 A 20030630**

Priority  
• DE 10229185 A 20020628  
• EP 0306917 W 20030630

Abstract (en)  
[origin: US7494075B2] A pressure regulating valve reduces the increased internal pressure in an aerosol spray can, filled with compressed gas, to a working pressure level for a spray valve (12). A regulating piston (52) is kept in equilibrium by a restoring force, and a sealing point (66, 68) is provided, which is closed at a pressure in the pressure regulation chamber (84) that is above the regulated pressure level. To prevent the precision of regulation from being adulterated by the decreasing internal pressure of the can as its contents are progressively withdrawn, a sealing means (86, 66; 67) is proposed, which seals off one free end of the piston (52, 74) from the internal pressure of the can and the regulated pressure. The variable internal pressure of the can is therefore no longer able to act on any axial face of the piston (52), and despite what may be a smaller piston face area, the precision of regulation is improved.

IPC 1-7  
**B65D 83/14**

IPC 8 full level  
**B65D 83/44** (2006.01); **B05B 9/04** (2006.01); **B65D 3/14** (2006.01); **B65D 83/14** (2006.01)

CPC (source: EP US)  
**B65D 83/52** (2013.01 - EP US); **Y10T 137/7808** (2015.04 - EP US); **Y10T 137/8704** (2015.04 - EP US)

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)  
**WO 2004002853 A1 20040108**; AT E312775 T1 20051215; AU 2003258500 A1 20040119; CA 2511747 A1 20040108; CN 100460291 C 20090211; CN 1665729 A 20050907; DE 10229185 A1 20040205; DE 50301948 D1 20060119; EP 1525144 A1 20050427; EP 1525144 B1 20051214; ES 2253704 T3 20060601; JP 2005531468 A 20051020; MX PA04012794 A 20050331; RU 2005102005 A 20050710; RU 2329929 C2 20080727; US 2005205133 A1 20050922; US 7494075 B2 20090224

DOCDB simple family (application)  
**EP 0306917 W 20030630**; AT 03761560 T 20030630; AU 2003258500 A 20030630; CA 2511747 A 20030630; CN 03815145 A 20030630; DE 10229185 A 20020628; DE 50301948 T 20030630; EP 03761560 A 20030630; ES 03761560 T 20030630; JP 2004516753 A 20030630; MX PA04012794 A 20030630; RU 2005102005 A 20030630; US 51645804 A 20041217