

Title (en)  
CONSTANT PRESSURE RELIEF VALVE FOR AN AIR CONTROL VALVE

Publication  
**EP 0105790 A3 19860305 (EN)**

Application  
**EP 83401867 A 19830923**

Priority  
US 43090682 A 19820930

Abstract (en)  
[origin: EP0105790A2] A constant pressure relief valve (10) for an air control valve maintains the pressure in a secondary air system below a predetermined value. A diaphragm (18) divides the valve housing (12) into two chambers (24 and 28) wherein the first chamber (24) contains the inlet orifice (22) controlled by a valve member (20) and an exhaust orifice (16). The second chamber (28) contains a reference pressure and a valve bias spring (32) cooperating together to provide the constant pressure. Due to back pressures at the exhaust orifice (16), the lift of valve member (20) is increased to increase flow through the relief valve (10) maintaining the constant relief pressure.

IPC 1-7  
**F01N 3/22**; **F16L 17/02**

IPC 8 full level  
**F16K 17/04** (2006.01); **F01N 3/22** (2006.01)

CPC (source: EP)  
**F01N 3/22** (2013.01); **F01N 3/227** (2013.01)

Citation (search report)  
• [X] US 4152893 A 19790508 - WAKITA NOBUAKI, et al  
• [A] US 4345737 A 19820824 - KAWAI HISASI, et al

Cited by  
CN110832239A; GB2260595A; GB2260595B

Designated contracting state (EPC)  
DE FR GB IT

DOCDB simple family (publication)  
**EP 0105790 A2 19840418**; **EP 0105790 A3 19860305**; BR 8305496 A 19840515; CA 1188940 A 19850618; JP S5989874 A 19840524

DOCDB simple family (application)  
**EP 83401867 A 19830923**; BR 8305496 A 19830930; CA 436377 A 19830909; JP 17950683 A 19830929