

Title (en)
VARIABLE GAS PRESSURE REGULATOR

Title (de)
VARIABLER GASDRUCKREGLER

Title (fr)
RÉGULATEUR DE PRESSION DE GAZ VARIABLE

Publication
EP 2761214 A4 20150812 (EN)

Application
EP 12827189 A 20120828

Priority
• AU 2011903466 A 20110829
• CA 2012050595 W 20120828

Abstract (en)
[origin: WO2013029175A1] A variable gas pressure regulator comprises a throttling valve regulating the fluid flow between a high-pressure fluid inlet and a regulated space fluidly connected to a fluid outlet, a high-pressure solenoid commanded to control fluid flow between the fluid inlet and a control space and a low-pressure solenoid commanded to control fluid flow between the control space and the regulated space. The regulator achieves a variable pressure at the regulator outlet by commanding the two solenoids to control the pressure in the control space relative to the regulated space. The regulator further comprises a lock-off valve which is controlled by the action of the low-pressure solenoid and of the high-pressure solenoid based on the relative pressure difference between the control space and the regulated space. The lock-off valve seals the passage between the fluid inlet and the regulated space.

IPC 8 full level
F16K 31/126 (2006.01); **F16K 17/168** (2006.01); **F16K 31/42** (2006.01); **F17C 13/04** (2006.01); **G05D 16/20** (2006.01)

CPC (source: CN EP US)
G05D 16/2033 (2013.01 - CN); **G05D 16/2095** (2019.01 - EP US); **Y02E 60/32** (2013.01 - CN EP)

Citation (search report)
• [X] US 5755254 A 19980526 - CARTER STEPHEN A [CA], et al
• [X] US 2009071548 A1 20090319 - PATTERSON DARYLL DUANE [US], et al
• [A] US 2005103382 A1 20050519 - CARTER STEPHEN A [CA]
• [A] US 2008271796 A1 20081106 - NEUMANN ERIC W [US], et al
• [A] US 2003000584 A1 20030102 - THORDARSON PETUR [US], et al
• See also references of WO 2013029175A1

Cited by
WO2016120673A1

Designated contracting state (EPC)
AL 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 RS SE SI SK SM TR

DOCDB simple family (publication)
WO 2013029175 A1 20130307; CN 103765067 A 20140430; CN 103765067 B 20150715; EP 2761214 A1 20140806; EP 2761214 A4 20150812; IN 2341CHN2014 A 20150619; RU 2014110695 A 20151010

DOCDB simple family (application)
CA 2012050595 W 20120828; CN 201280041641 A 20120828; EP 12827189 A 20120828; IN 2341CHN2014 A 20140327; RU 2014110695 A 20120828