

Title (en)  
HYDRAULIC CYLINDER

Title (de)  
HYDRAULIKZYLINDER

Title (fr)  
CYLINDRE HYDRAULIQUE

Publication  
**EP 3835600 A4 20220504 (EN)**

Application  
**EP 19859799 A 20190819**

Priority  
• JP 2018171907 A 20180913  
• JP 2019032236 W 20190819

Abstract (en)  
[origin: EP3835600A1] In a hydraulic cylinder (10) in which an operation piston (20) and a boosting piston (22) are disposed in tandem with a partition wall (26) provided therebetween, a high-pressure fluid is sealed in two axially adjacent pressure chambers. In an operation step, the high-pressure fluid is prepared so as to be able to flow between the pressure chambers in which the high-pressure fluid is sealed. Next, when the operation piston (20) has moved to an end side, the flow of the fluid between the two pressure chambers is blocked by a boost switching mechanism (33) such that the high-pressure fluid in one of the pressure chambers is discharged.

IPC 8 full level  
**F15B 11/036** (2006.01); **F15B 15/20** (2006.01)

CPC (source: EP KR RU)  
**F15B 11/0365** (2013.01 - EP RU); **F15B 13/027** (2013.01 - KR); **F15B 15/14** (2013.01 - RU); **F15B 15/1428** (2013.01 - KR);  
**F15B 15/1447** (2013.01 - KR); **F15B 15/1457** (2013.01 - KR); **F15B 15/20** (2013.01 - RU); **F15B 15/204** (2013.01 - EP);  
**F15B 2211/30505** (2013.01 - EP); **F15B 2211/3058** (2013.01 - EP); **F15B 2211/40515** (2013.01 - EP); **F15B 2211/41554** (2013.01 - EP);  
**F15B 2211/7056** (2013.01 - EP); **F15B 2211/775** (2013.01 - EP); **F15B 2211/8855** (2013.01 - EP)

Citation (search report)  
• [IA] EP 2314884 A2 20110427 - PROSEAL UK LTD [GB]  
• [IA] US 2017108014 A1 20170420 - HÄNDLE WERNER [DE], et al

Cited by  
US11261885B2; WO2024081989A1

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)  
**EP 3835600 A1 20210616; EP 3835600 A4 20220504; EP 3835600 B1 20230816**; BR 112021004709 A2 20210601; CN 112689714 A 20210420;  
CN 112689714 B 20230516; JP 7137163 B2 20220914; JP WO2020054322 A1 20210830; KR 102531495 B1 20230511;  
KR 20210049935 A 20210506; MX 2021002864 A 20210528; RU 2769896 C1 20220407; RU 2769896 C9 20220426;  
TW 202020318 A 20200601; TW I702344 B 20200821; WO 2020054322 A1 20200319

DOCDB simple family (application)  
**EP 19859799 A 20190819**; BR 112021004709 A 20190819; CN 201980059806 A 20190819; JP 2019032236 W 20190819;  
JP 2020546791 A 20190819; KR 20217010956 A 20190819; MX 2021002864 A 20190819; RU 2021110015 A 20190819;  
TW 108132778 A 20190911