

Title (en)  
Piston-cylinder combination for generating and transmitting pressure forces.

Title (de)  
Kolben-Zylinder-Aggregat zur Erzeugung und Übertragung von Druckkräften.

Title (fr)  
Agréгат à piston-cylindre pour générer et transmettre des forces de compression.

Publication  
**EP 0489306 B1 19940323 (DE)**

Application  
**EP 91119809 A 19911121**

Priority  
DE 4038950 A 19901206

Abstract (en)  
[origin: US5301598A] A piston-cylinder unit for producing and transmitting compressive forces onto adjusting elements which are guided so as to be slidable on a straight line. The piston-cylinder unit includes a push rod mounted so as to be capable of oscillating transversely of the direction of the compressive forces in a unilaterally open skirt-type piston. The push rod is slidably movable from a centered position into an oscillating position. The centered position is determined by sealing members placed so as to face each other and mounted at an outer periphery of the push rod and an inner rim of the skirt-type piston. The push rod is movable into the skirt-type piston toward a fixed stop arranged in the skirt-type piston. The push rod is movable against the force of a spring element arranged at the bottom of the skirt-type piston.

IPC 1-7  
**B21B 31/32**

IPC 8 full level  
**F15B 15/14** (2006.01); **B21B 31/20** (2006.01); **B21B 31/32** (2006.01)

CPC (source: EP KR US)  
**B21B 31/203** (2013.01 - EP US); **B21B 31/32** (2013.01 - EP KR US)

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Designated contracting state (EPC)  
AT BE DE ES FR GB IT NL SE

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**EP 91119809 A 19911121**; AT 91119809 T 19911121; CN 91111460 A 19911206; DE 4038950 A 19901206; DE 59101237 T 19911121; ES 91119809 T 19911121; KR 910022331 A 19911206; SU 5010182 A 19911205; US 80212991 A 19911203