

Title (en)  
A crane and a method for controlling a crane

Title (de)  
Kran und Methode zur Steuerung des Krans

Title (fr)  
Grue et procédé pour contrôler une grue

Publication  
**EP 1528262 A1 20050504 (EN)**

Application  
**EP 03024717 A 20031029**

Priority  
EP 03024717 A 20031029

Abstract (en)  
A crane, comprising at least one hydraulic cylinder/piston unit (2) in which a piston rod (5) is displaceable in a cylinder (3) and in which a piston (4) that is connected to the piston rod separates the cylinder chamber in a cylinder side chamber (6) and a piston rod side chamber (7) that is provided with an opening (8) in the cylinder gable (9) in order to permit a displacement of the piston rod (5) out of and into the cylinder, a first conduit (10) for conducting a pressure fluid between a pressure fluid source (11) and the cylinder side chamber (6), a second conduit (13) for conducting pressure fluid between the piston rod side chamber (7) and a pressure fluid reservoir (14) that has a lower pressure than the pressure fluid source (11), a third conduit (15) for regenerative conduction of a pressure fluid between the piston rod side chamber (7) and the cylinder side chamber (6) when pressure fluid is delivered from the pressure fluid source to the cylinder side chamber (6) for the purpose of ejecting the piston rod (5) out of the cylinder, and means (23) for breaking the regenerative conduction of pressure fluid at a predetermined moment. In at least one of the first and the second conduit (10,13) there is arranged a pressure delimiting member (16) for delimiting the pressure in the cylinder side chamber (6) and the piston rod side chamber (7) respectively.

IPC 1-7  
**F15B 11/024**; B66C 23/44

IPC 8 full level  
**B66C 13/18** (2006.01); **B66C 23/44** (2006.01); **F15B 11/024** (2006.01)

CPC (source: EP)  
**B66C 13/18** (2013.01); **B66C 23/54** (2013.01); **F15B 11/024** (2013.01); **F15B 2011/0243** (2013.01); **F15B 2211/30525** (2013.01); **F15B 2211/3058** (2013.01); **F15B 2211/50518** (2013.01); **F15B 2211/50581** (2013.01); **F15B 2211/5153** (2013.01); **F15B 2211/55** (2013.01); **F15B 2211/7057** (2013.01); **F15B 2211/7128** (2013.01); **F15B 2211/75** (2013.01)

Citation (search report)  
• [XAY] US 4359931 A 19821123 - PALMERSHEIM GERARD M, et al  
• [Y] DE 3801007 A1 19890727 - JOH TIRRE OHG MASCHF [DE]  
• [X] GB 2159605 A 19851204 - SHIEH MING CHUAN  
• [A] DE 1406784 A1 19690417 - CREDE & CO GMBH GEB  
• [A] EP 0482237 A1 19920429 - KOBE STEEL LTD [JP]  
• [A] EP 0481120 A1 19920422 - KOBE STEEL LTD [JP]

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)  
**EP 1528262 A1 20050504**

DOCDB simple family (application)  
**EP 03024717 A 20031029**