

Title (en)  
CENTERLESS GRINDING MACHINE

Title (de)  
SPITZENLOSE SCHLEIFMASCHINE

Title (fr)  
MACHINE À MEULER SANS CENTRE

Publication  
**EP 2594363 B1 20150603 (EN)**

Application  
**EP 11806686 A 20110707**

Priority  
• JP 2010157839 A 20100712  
• JP 2011065594 W 20110707

Abstract (en)  
[origin: EP2594363A1] A centerless grinding machine is provided of which the position of a regulating wheel (2) can be easily and simply set and adjusted according to the outer diameter of a grinder (1), the outer diameter of the regulating wheel (2) and the outer diameter of the workpiece (5). The grinding machine includes a table (11) mounted on a bed (10) through a horizontal slide mechanism (A). A swing base (13) is mounted on the table (11) through a <sup>3</sup>-swing slide mechanism (B). An upper slider (12) is mounted on the swing base (13) through a lateral slide mechanism (C). The regulating wheel (2) is mounted on the upper slider (12). The horizontal slide mechanism (A) moves the regulating wheel (2) while grinding the workpiece (5) according to the outer diameter of the workpiece (5) by moving the table (11) in a horizontal direction relative to the bed (10). The <sup>3</sup>-swing slide mechanism (B) swings the swing base (13) about the center axis (w) of the workpiece (5). The lateral slide mechanism (C) is capable of moving the upper slider (12) relative to the swing base (13). By swinging the swing base (13) with the <sup>3</sup>-swing slide mechanism (B), it is possible to adjust a center height angle (<sup>3</sup>) of the workpiece (5) relative to the regulating wheel (2). Thus it is possible to always keep constant the center height angle (<sup>3</sup>).

IPC 8 full level  
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