

Title (en)  
Multi-mode wrench

Title (de)  
Multimodaler Schlüssel

Title (fr)  
Clé multimodale

Publication  
**EP 3056313 B1 20170906 (EN)**

Application  
**EP 15154405 A 20150210**

Priority  
EP 15154405 A 20150210

Abstract (en)  
[origin: EP3056313A1] A multi-mode one-way wrench includes a head, a toothed wheel, a leading pawl, at least one following pawl and a switch. The head includes cutouts in communication with a chamber. The toothed wheel rests in the chamber and includes teeth. The pawls are movably rest in the cutouts and adapted for alternate engagement with the toothed wheel. The following pawl includes a stem. The switch rests on the head and made with at least one arched groove for receiving and guiding the stem to move the following pawl between a first mode for engagement with the toothed wheel and a second mode kept from the toothed wheel. The cutouts are biased from one another by an angle of  $360^\circ \times (M+1/L) \div N$ , wherein L is an integer for representing the number of the cutouts, M is any proper integer, and N is an integer for representing the number of the teeth.

IPC 8 full level  
**B25B 13/46** (2006.01)

CPC (source: EP)  
**B25B 13/463** (2013.01)

Cited by  
CN113172576A

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