

Title (en)
ELECTROMAGNETIC MODE CHANGE MECHANISM FOR POWER TOOL

Title (de)
ELEKTROMAGNETISCHER MODUSUMSCHALTVORRICHTUNGSMECHANISMUS FÜR ELEKTROWERKZEUGE

Title (fr)
MÉCANISME DE CHANGEMENT DE MODE ÉLECTROMAGNÉTIQUE POUR OUTIL ÉLECTRIQUE

Publication
EP 3056314 A1 20160817 (EN)

Application
EP 16160612 A 20140310

Priority
• US 201313799177 A 20130313
• EP 14158587 A 20140310

Abstract (en)
A mode change mechanism for a power tool includes an actuator (114) with a permanent magnet (126, 128). The actuator is moveable between a first position for a first mode of operation, and a second position for a second mode of operation. A first positioning member is adjacent the first position composed of a ferromagnetic material to attract the permanent magnet (126, 128). A second positioning member is adjacent the second position and composed of a ferromagnetic material to attract the permanent magnet. An electromagnet (130) may be energized to move the actuator (114) between the first position and the second position. When the electromagnet is not energized and the actuator is in the first position, the actuator is retained in the first position. When the electromagnet is not energized and the actuator is in the second position, the actuator is retained in the second position. When the electromagnet is energized, the actuator moves between the first and second positions.

IPC 8 full level
B25B 23/14 (2006.01); **B25B 23/147** (2006.01)

CPC (source: EP)
B25B 23/141 (2013.01); **B25B 23/147** (2013.01)

Citation (applicant)
• EP 2537639 A1 20121226 - BLACK & DECKER INC [US]
• US 2012325509 A1 20121227 - PUZIO DANIEL [US], et al

Citation (search report)
• [A] FR 2520278 A1 19830729 - GARDNER DENVER GMBH [DE]
• [A] GB 701630 A 19531230 - DILLON STEVENS
• [A] GB 332379 A 19300724 - EDWIN LEWIS CONNELL, et al

Cited by
WO2018089822A1; US11097404B2; US11583982B2

Designated contracting state (EPC)
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