

Title (en)  
INSULATED RATCHET WRENCH

Publication  
**EP 0331534 B1 19930421 (FR)**

Application  
**EP 89400133 A 19890117**

Priority  
FR 8802720 A 19880303

Abstract (en)  
[origin: EP0331534A1] Insulated ratchet wrench comprising a body (1), a rotor (3) of which one end is engaged in the body (1), a cap (8) fitted over the body, an element for partially covering the rotor such as a socket (7) and an electrical insulator (9, 12) covering these various parts, characterised in that it comprises an insulating ring (15) surrounding the section (3a) of the rotor (3) left free by the said element (7) and which is provided with an end collar (16) fixed to the insulating coating (9) of the body (1), and a slight play is retained between this ring (15) and the rotor (3). The insulating ring (15) is manufactured with a very accurate outer dimension which always remains the same, which allows it to comply with new electrical insulation standards for such a tool. <IMAGE>

IPC 1-7  
**B25B 13/46; B25G 1/12**

IPC 8 full level  
**B25B 13/06** (2006.01); **B25B 13/46** (2006.01); **B25G 1/12** (2006.01)

CPC (source: EP)  
**B25B 13/06** (2013.01); **B25B 13/461** (2013.01); **B25G 1/125** (2013.01)

Cited by  
EP3192615A1; CN109176374A; CN103381581A; CN103732356A; DE112011105024B4; WO2012139302A1; WO0059686A3; TWI386285B; TWI398330B

Designated contracting state (EPC)  
DE ES FR GB IT

DOCDB simple family (publication)  
**EP 0331534 A1 19890906; EP 0331534 B1 19930421**; DE 68906060 D1 19930527; DE 68906060 T2 19930729; ES 2040475 T3 19931016; FR 2628019 A1 19890908; FR 2628019 B1 19900727

DOCDB simple family (application)  
**EP 89400133 A 19890117**; DE 68906060 T 19890117; ES 89400133 T 19890117; FR 8802720 A 19880303