

Title (en)

Electric rotary power tool apparatus holdable by hand during operation, kit comprising the same, and novel switch means therefor.

Title (de)

Elektrisch angetriebenes Werkzeug, von Hand während der Arbeit haltbar, ein solches Werkzeug enthaltendes Kit und neuer Schalter dafür.

Title (fr)

Outil électrorotatif utilisable manuellement en cours de travail, kit comprenant cet outil et interrupteur pour cet outil.

Publication

EP 0321594 A1 19890628 (DE)

Application

EP 87118936 A 19871221

Priority

EP 87118936 A 19871221

Abstract (en)

A power tool apparatus which is hand-holdable during operation serves for facilitating especially heavy duty work, e.g. on a high scaffolding. The apparatus is composed of three building blocks, a central one having an elongated enveloping shell and an integral transverse wall dividing the shell into a forward and a rearward, compartment. The latter contains a speed-reducing transmission unit and has a motor unit attached to the shell rear end. As a third building block the operator equipped with a kit according to the invention has the choice of several inset units, among them a simple front end wall with an intermediate shaft, and the same end wall and an impact-generating unit on the intermediate shaft, which inset units he can introduce through the open front end of the enveloping shell and exchange them as required without taking apart the transmission unit or detaching the motor unit. A handle can likewise be attached to the central shell unit. Various novel types of switches are also provided for use at the rearward end of the motor and/or with the handle.

IPC 1-7

B23B 45/00; **B25B 21/00**; **B25B 21/02**; **B25F 3/00**; **H01H 9/06**

IPC 8 full level

B25B 21/00 (2006.01); **B25B 21/02** (2006.01); **B25F 3/00** (2006.01); **H01H 9/06** (2006.01)

CPC (source: EP)

B25B 21/00 (2013.01); **B25B 21/02** (2013.01); **B25F 3/00** (2013.01); **H01H 9/06** (2013.01)

Citation (search report)

- BE 407157 A
- GB 1023099 A 19660316 - DESOUTTER BROTHERS LTD
- US 3294183 A 19661227 - RILEY JR ROBERT H, et al
- US 4619162 A 19861028 - VAN LAERE CHRISTIAAN G M [CH]
- US 4169162 A 19790925 - APPLEMAN MILO D
- US 4505170 A 19850319 - VAN LAERE CHRISTIAAN G M [CH]
- GB 626869 A 19490722 - ROMEO AGUSTONI
- US 3977278 A 19760831 - JACKSON JOHN VAN
- US 1368617 A 19210215 - EVERETT HENRY A
- US 2119220 A 19380531 - LOYD SCRUGGS
- US 2194619 A 19400326 - LOYD SERUGGS
- FR 670146 A 19291125 - BLACK & DECKER MFG CO
- US 4164670 A 19790814 - MAHER WILLIAM M [US]

Cited by

AU631615B2; FR2856324A1; EP0899065A3; EP1182307A1; EP2815850A1; EP1961522A1; EP3178613A1; CN106826700A; US6102632A; EP0631851A1; EP0557795A1; US5358073A; CH687051A5; US9114514B2; US6543926B2; US6286611B1; WO2008101556A1; US6296427B1; US6461088B2

Designated contracting state (EPC)

AT BE CH DE ES FR GB GR IT LI LU NL SE

DOCDB simple family (publication)

EP 0321594 A1 19890628

DOCDB simple family (application)

EP 87118936 A 19871221