

Title (en)

HAND WHEEL, ESPECIALLY FOR INITIATING A ROTATIONAL MOVEMENT IN THE HOLDER OF A ROLLER FILE

Title (de)

HANDRAD, INSBESONDERE ZUR EINLEITUNG EINER DREHBEWEGUNG IN DIE HALTERUNG EINER ROLLKARTEI

Title (fr)

BOUTON, SERVANT NOTAMMENT A IMPRIMER UN MOUVEMENT DE ROTATION AU SUPPORT D'UN FICHIER ROTATIF

Publication

**EP 1438643 A1 20040721 (DE)**

Application

**EP 02776852 A 20021018**

Priority

- DE 0204006 W 20021018
- DE 10153532 A 20011023

Abstract (en)

[origin: WO03038540A1] In order to increase the grip of a hand wheel (4) which is especially intended for a roller file, said hand wheel consists of a base body (6), an outer shell (9) and a rubber-elastic insert (12) disposed between the base body (6) and the outer shell (9). Said insert is provided with protuberances (11) which jut out in the outer shell (9).

IPC 1-7

**G05G 1/10**

IPC 8 full level

**G05G 1/10** (2006.01)

CPC (source: EP US)

**G05G 1/10** (2013.01 - EP US); **Y10T 74/2084** (2015.01 - EP US)

Citation (search report)

See references of WO 03038540A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LU MC NL PT SE SK TR

DOCDB simple family (publication)

**WO 03038540 A1 20030508**; AT E291254 T1 20050415; DE 10153532 A1 20030508; DE 10153532 B4 20060914; DE 50202509 D1 20050421; EP 1438643 A1 20040721; EP 1438643 B1 20050316; ES 2236591 T3 20050716; US 2004200311 A1 20041014; US 7219577 B2 20070522

DOCDB simple family (application)

**DE 0204006 W 20021018**; AT 02776852 T 20021018; DE 10153532 A 20011023; DE 50202509 T 20021018; EP 02776852 A 20021018; ES 02776852 T 20021018; US 48750304 A 20040220