

Title (en)
VIBRATION ISOLATOR FOR HAND-HELD VIBRATING DEVICES

Title (de)
SCHWINGUNGABSORBER FÜR HANDVIBRATIONSAPPARATE

Title (fr)
ISOLATEUR DE VIBRATIONS POUR DISPOSITIFS VIBRANTS TENUS EN MAIN

Publication
EP 0680399 B1 20001115 (EN)

Application
EP 94905414 A 19931216

Priority
• US 9312271 W 19931216
• US 969393 A 19930127

Abstract (en)
[origin: WO9416864A1] An isolator is used in a hand-held vibrating device (10) for providing optimum vibration isolation by utilizing buckling elastomer sections (44A) which operate in a buckled mode during normal use. The buckled elastomer sections (44A) significantly reduce the spring rate within an operating load range thus substantially reducing the vibration transmitted to the user. Six embodiments are shown which utilize buckling sections to enhance vibration isolation along an axial direction of vibration. A first embodiment includes a frusto-conical section (20A). A first embodiment of a front grip isolator (30A) that is used with the buckling isolator (20A) for reducing the radial mechanical vibration transmitted to the front hand of the user, also utilizing buckling sections, is also taught.

IPC 1-7
B25D 17/24; **B25D 17/04**

IPC 8 full level
B25D 17/04 (2006.01); **B25D 17/24** (2006.01)

CPC (source: EP)
B25D 17/043 (2013.01); **B25D 17/046** (2013.01); **B25D 17/24** (2013.01); **B25D 2222/57** (2013.01); **B25D 2250/381** (2013.01)

Cited by
US7676890B2; US8141209B2

Designated contracting state (EPC)
CH DE FR GB IT LI SE

DOCDB simple family (publication)
WO 9416864 A1 19940804; DE 69329686 D1 20001221; DE 69329686 T2 20010607; EP 0680399 A1 19951108; EP 0680399 A4 19960110; EP 0680399 B1 20001115

DOCDB simple family (application)
US 9312271 W 19931216; DE 69329686 T 19931216; EP 94905414 A 19931216