

Title (en)  
Magnetic lifting apparatus

Title (de)  
Magnetische Hebevorrichtung

Title (fr)  
Appareil de levage magnétique

Publication  
**EP 1184327 A1 20020306 (EN)**

Application  
**EP 00118925 A 20000901**

Priority  
EP 00118925 A 20000901

Abstract (en)  
A magnetic lifting apparatus by using neodymium magnet, comprising a plurality of polarity plates (10) disposed with a predetermined interval and having non-magnetic medium (11) in the longitudinal center; a plurality of interval members (20) disposed between the polarity plates (10); a top cover (30) covering the interval members (20) and the polarity plates (10), having a hook (31) on the upper side; a plurality of neodymium magnets (40) having S/N polarity in opposite and disposed between the polarity plates (10); a plurality of rotors (50) rotated with the neodymium magnets (40) being inserted therein; a switch handle (60) for switching polarity position of the rotor (50) and the neodymium magnet (40) engaged therewith to make magnetic attraction on and off; and oxidation prevention means (70) disposed around the neodymium magnet (40), for preventing the neodymium magnet (40) from being in contact with oxygen. The present invention has an effect to prevent the neodymium magnet from being oxidized to improve magnetic performance and endurance. Further, the improved magnetic lifting apparatus of the invention minimizes a body size and its weight, guarantees simple operation and improves performance and productivity. <IMAGE>

IPC 1-7  
**B66C 1/04**

IPC 8 full level  
**B66C 1/04** (2006.01)

CPC (source: EP)  
**B66C 1/04** (2013.01)

Citation (search report)

- [Y] WO 9965644 A1 19991223 - TECNOMAGNETE SPA [IT], et al
- [Y] EP 0924715 A2 19990623 - SHINETSU CHEMICAL CO [JP]
- [A] EP 0630851 A1 19941228 - JUNG HYUNG [KR]
- [A] GB 2292838 A 19960306 - UNIV CARDIFF [GB]
- [A] GB 2323215 A 19980916 - PARAGON ENERGY CONSERVATION SY [GB], et al

Cited by  
WO2004067433A1

Designated contracting state (EPC)  
DE FR GB IT

DOCDB simple family (publication)  
**EP 1184327 A1 20020306; EP 1184327 B1 20030625; DE 60003554 D1 20030731; DE 60003554 T2 20040108**

DOCDB simple family (application)  
**EP 00118925 A 20000901; DE 60003554 T 20000901**