

Title (en)  
LIE-DOWN MASSAGER

Title (de)  
LIEGE-MASSAGEGERÄT

Title (fr)  
DISPOSITIF DE MASSAGE EN POSITION COUCHEE

Publication  
**EP 1624842 A4 20090506 (EN)**

Application  
**EP 04731087 A 20040504**

Priority

- IB 2004050582 W 20040504
- US 42934503 A 20030505
- US 24991503 A 20030516
- US 44551703 A 20030527
- US 61459203 A 20030707
- US 61789603 A 20030711

Abstract (en)  
[origin: WO2004098482A2] A lie-down massager includes a base frame (12) having an elongated top panel (14), a rider (18) provided below the elongated top panel of the base frame, a guide member (26) movably engaged between the base frame and the rider so as to enable the rider to make a horizontally reciprocal movement relative to the base frame, a lifter (20) having a top plate (120), a bottom plate (122), and a lifting device moving the top plate vertically relative to the bottom plate, and massage bumps (100) attached to the top plate of the lifter and moving vertically and/or horizontally along the elongated top opening of the elongated top panel of the base frame. The lifting device of the lifter adopts direct linear movement. The lifting device includes a screw lifting mechanism, a combination gear mechanism, a rack gear mechanism, a hydraulic lifting mechanism and an air cylinder lifting mechanism.

IPC 8 full level  
**A61H 7/00** (2006.01); **A61H 1/00** (2006.01); **A61H 15/00** (2006.01); **A61H 37/00** (2006.01)

IPC 8 main group level  
**A61H** (2006.01)

CPC (source: EP)  
**A61H 7/004** (2013.01); **A61H 15/0078** (2013.01); **A61H 2015/0007** (2013.01); **A61H 2015/0042** (2013.01); **A61H 2201/0142** (2013.01); **A61H 2201/0192** (2013.01); **A61H 2201/0207** (2013.01); **A61H 2201/10** (2013.01); **A61H 2201/1215** (2013.01); **A61H 2201/149** (2013.01); **A61H 2201/1669** (2013.01); **A61H 2201/169** (2013.01); **A61H 2203/0456** (2013.01); **A61H 2205/04** (2013.01); **A61H 2205/081** (2013.01)

Citation (search report)

- [XY] DE 20200572 U1 20020613 - DWZONE MEDICAL INSTR CO [KR]
- [Y] US 3003497 A 19611010 - NUNES JOHN L
- [X] WO 0126580 A2 20010419 - PARK SANG KYOO [KR]
- [X] WO 0160310 A1 20010823 - LIM SANG HYUN [KR]
- [X] US 6454732 B1 20020924 - LEE SANG-BOK [KR]
- [E] WO 2004093771 A2 20041104 - HAKJIN KIM [US]
- [L] US 2004210174 A1 20041021 - KIM HAKJIN [US]
- [A] US 3877422 A 19750415 - HEUSER GORDON D, et al
- [A] EP 1145701 A1 20011017 - LIANG CHING YAO [TW]
- See references of WO 2004098482A2

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)  
**WO 2004098482 A2 20041118; WO 2004098482 A3 20050519;** AU 2004236580 A1 20041118; AU 2004236580 B2 20090129; BR PI0410690 A 20060620; CA 2553131 A1 20041118; CA 2553131 C 20090728; EP 1624842 A2 20060215; EP 1624842 A4 20090506; MX PA05011442 A 20060531

DOCDB simple family (application)  
**IB 2004050582 W 20040504;** AU 2004236580 A 20040504; BR PI0410690 A 20040504; CA 2553131 A 20040504; EP 04731087 A 20040504; MX PA05011442 A 20040504