

Title (en)  
INFECTION CONTROL LIFTING STRAP AND PATIENT LIFTING SYSTEM

Title (de)  
INFEKTIONSVERMEIDENDES HEBEBAND UND PATIENTENHEBESYSTEM

Title (fr)  
SANGLE DE LEVAGE ET DE CONTRÔLE D'INFECTION ET SYSTÈME DE LEVAGE DE PATIENT

Publication  
**EP 3087965 A1 20161102 (EN)**

Application  
**EP 16167571 A 20160428**

Priority  
US 201514697848 A 20150428

Abstract (en)  
A patient lifting device includes an infection control lift strap with an inner core and an outer plastic layer that can be easily and effectively cleaned with standard disinfectant. The lift strap includes a waterproof sealed belt clamp assembly. A winch assembly includes a motor and high-efficiency gear assembly that lifts and lowers the strap with a spool assembly including an eccentric cylindrical spool. The eccentric cylindrical spool eliminates inconsistent performance of the lifting device as the strap drapes and coils onto the spool without raised attachment points. The strap includes top and bottom layers with different coefficients of friction to prevent slipping and self-tightening of the strap on the spool. The lifting device includes a thickness roller, a strap guard, and an electro-mechanical brake that locks the motor and prevents back driving. The gear assembly provides back driving when power is removed and the brake is released.

IPC 8 full level  
**A61G 7/10** (2006.01)

CPC (source: EP)  
**A61G 7/1015** (2013.01); **A61G 7/1042** (2013.01); **A61G 7/1061** (2013.01); **A61G 7/1063** (2013.01); **A61G 7/1073** (2013.01);  
**A61G 7/1051** (2013.01); **A61G 7/1078** (2013.01)

Citation (search report)  
• [A] US 2010064432 A1 20100318 - DUQUETTE NOEL [CA], et al  
• [A] US 3506985 A 19700421 - LANG FREDERIC F  
• [A] EP 2777674 A1 20140917 - LIKO RES AND DEV AB [SE]

Cited by  
GB2568899A; US2020230006A1; US11679049B2; US10646392B2

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**EP 3087965 A1 20161102; EP 3087965 B1 20180321**

DOCDB simple family (application)  
**EP 16167571 A 20160428**