

Title (en)

Articulated ladder or raisable platform with position path control and active vibration damping

Title (de)

Drehleiter oder Hebebühne mit Bewegungssteuerungsvorrichtung und aktiver schwingungsdämpfender Vorrichtung

Title (fr)

Echelle articulée ou plate-forme mobile avec dispositif de contrôle du mouvement et dispositif d'amortissement actif de vibrations

Publication

**EP 1772588 A2 20070411 (EN)**

Application

**EP 06119983 A 20060901**

Priority

DE 102005042721 A 20050908

Abstract (en)

Turntable ladder or the like, with a telescopic ladder unit and, attached at the end of the ladder unit, an articulated arm which carries a cage, which turntable ladder contains a control for moving the ladder sections, formed in such a way that, during cage travel, vibrations of the ladder sections are suppressed, while at least one of the measured variables, bending of the ladder unit in the horizontal and vertical direction, angle of elevation, angle of rotation, run-out length and torsion of the ladder unit is fed back via a controller to the control variables for the drives and for which a pilot control is provided which represents the idealised movement behaviour of the ladder during cage travel in a dynamic model, based on differential equations and calculates the idealised control variables for the ladder section drives from the dynamic model for an essentially vibration-free movement of the ladder.

IPC 8 full level

**E06C 5/44** (2006.01); **B66F 11/04** (2006.01); **E06C 5/06** (2006.01); **E06C 5/36** (2006.01)

CPC (source: EP)

**B66F 11/044** (2013.01); **E06C 5/06** (2013.01); **E06C 5/36** (2013.01); **E06C 5/44** (2013.01)

Citation (applicant)

- DE 10016136 C2 20030821 - IVECO MAGIRUS [DE]
- DE 10016137 C2 20030821 - IVECO MAGIRUS [DE]

Cited by

EP3034455A1; CN110509276A; RU2748090C1; EP3556968A1; EP2103760A3; CN105717947A; RU2695006C2; FR2980184A1; EP3556967A1; RU2700735C1; WO2013097509A1; CN102707730A; EP3556969A1; US8082083B2; US8505184B2; US9695025B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK YU

DOCDB simple family (publication)

**EP 1772588 A2 20070411**; **EP 1772588 A3 20091007**; **EP 1772588 B1 20130619**; DE 102005042721 A1 20070315; ES 2427563 T3 20131031

DOCDB simple family (application)

**EP 06119983 A 20060901**; DE 102005042721 A 20050908; ES 06119983 T 20060901