

Title (en)

Elevator without counterweight with a cogged belt and pulley

Title (de)

Aufzug ohne Gegengewicht mit Zahnriemen und Zahnriemenscheibe

Title (fr)

Ascenseur sans contrepoids avec une courroie crantée et une poulie

Publication

EP 2567924 A1 20130313 (EN)

Application

EP 12154808 A 20120210

Priority

ES 201100834 U 20110907

Abstract (en)

The present invention relates to an elevator without counterweight with a cogged belt and pulley which deflecting pulleys (3) and (4) are arranged above and below the car (1), respectively; in the upper portion of the hoistway (13) there is arranged, on one hand, a hanger (6) for the cogged belt (2), on the other hand, a machine (5) having a cogged driving pulley (8), and finally in the lower portion of the hoistway, there is arranged a tensioner (9) associated with a deflecting pulley (10), another deflecting pulley (11) being provided. Wherein the pulley has a diameter greater than 100 mm, it is made of a single part, having helical cogs, whereas the machine has an associated deflecting pulley (23), non-slip rollers, and the cogged belt is made of transparent polyurethane and a textile mesh covering the cogged portion. In addition to a uniform and well balanced translation of the car, an effective reduction of noise levels is achieved.

IPC 8 full level

B66B 11/08 (2006.01); **B66B 7/06** (2006.01); **B66B 11/00** (2006.01)

CPC (source: EP)

B66B 7/062 (2013.01); **B66B 11/007** (2013.01); **B66B 11/08** (2013.01)

Citation (applicant)

- WO 2008000886 A2 20080103 - KONE CORP [FI], et al
- WO 2004094287 A2 20041104 - OTIS ELEVATOR CO [US], et al
- WO 2004094289 A1 20041104 - OTIS ELEVATOR CO [US], et al
- WO 2004067429 A1 20040812 - KONE CORP [FI], et al
- WO 2004041704 A1 20040521 - KONE CORP [FI], et al
- WO 2005087647 A2 20050922 - KONE CORP [FI], et al
- ES 2280579 T3 20070916 - INVENTIO AG

Citation (search report)

- [A] US 2010133046 A1 20100603 - ALLWARDT ANKE [CH], et al
- [A] EP 1493708 A2 20050105 - SASSI ALBERTO SPA [IT]

Cited by

EP2862831A3; EP4269310A1; CN106494974A; EP4249417A3; EP3498653A1; WO2017160581A1; US10941020B2; US11447368B2; WO2023208406A1

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 2567924 A1 20130313; **EP 2567924 B1 20140416**; ES 1075599 U 20111107; ES 1075599 U8 20111124; ES 1075599 Y 20120202; ES 2480195 T3 20140725; PT 2567924 E 20140718

DOCDB simple family (application)

EP 12154808 A 20120210; ES 12154808 T 20120210; ES 201100834 U 20110907; PT 12154808 T 20120210