

Title (en)  
Elevator apparatus

Title (de)  
Aufzugsvorrichtung

Title (fr)  
Appareil élévateur

Publication  
**EP 2522616 A1 20121114 (EN)**

Application  
**EP 11165847 A 20110512**

Priority  
EP 11165847 A 20110512

Abstract (en)  
The invention describes an elevator apparatus (1) comprising an elevator cage (10); a guiding means (11) for guiding the elevator cage (10) along a ladder (2); a drive belt (13) comprising a plurality of climb pins (14, 14'), wherein a climb pin (14, 14') is realised to engage with a rung (20) of the ladder (2); and a motor (12) arranged on the elevator cage (10), which motor (12) is realised to drive the drive belt (13). The invention further describes a method of constructing a hollow tower (4), which method comprises the steps of constructing a lower region (40) of the tower (4); arranging a lower ladder section (24) of a ladder (2) at the level of the lower tower region (40); arranging such an elevator apparatus (1) on the lower ladder section (24); constructing an upper region (40') of the tower (4) on the lower tower region (40); and connecting an upper ladder section (24') of the ladder (2) to the lower ladder section (24) such that the elevator apparatus (1) can move an elevator cage (10) along the connected ladder sections (24, 24'). The invention also describes a hollow tower (4) comprising such an elevator apparatus (1) arranged on a ladder (2), which ladder (2) is arranged in the interior of the tower (4).

IPC 8 full level  
**B66B 9/02** (2006.01); **E06C 7/12** (2006.01)

CPC (source: EP)  
**B66B 9/02** (2013.01); **E06C 7/12** (2013.01); **E06C 9/02** (2013.01)

Citation (search report)  
• [XY] US 4467889 A 19840828 - MAUBACH GERD [DE], et al  
• [X] US 2003031546 A1 20030213 - ARAKI TOSHIYUKI [JP], et al  
• [Y] DE 202010007565 U1 20100902 - ZARGES ALUMINIUM SYSTEME GMBH [DE]  
• [A] US 6357549 B1 20020319 - BRENNAN DONALD D [US], et al

Cited by  
US10155251B2; CN105026750A; EP3246564A1; EP3572366A1; CN107618016A; CN110921475A; RU2764326C1; US9869293B2; WO2014094792A1; WO2014108134A1; US9427782B2; US10005106B2; WO2023038545A1; WO2015073981A1; WO2024040263A1

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 2522616 A1 20121114**

DOCDB simple family (application)  
**EP 11165847 A 20110512**