

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.

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

Citation (applicant)  
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• WO 2004094287 A2 20041104 - OTIS ELEVATOR CO [US], et al  
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• WO 2004067429 A1 20040812 - KONE CORP [FI], et al  
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