

Title (en)
PULSED OPENING OF ELEVATOR BRAKE ENABLING PASSENGER EVACUATION

Title (de)
GEPULSTE ÖFFNUNG EINER AUFZUGSBREMSE ZUR INSASSENEVAKUIERUNG

Title (fr)
OUVERTURE PULSÉ DE FREIN D'ASCENSEUR PERMETTANT L'ÉVACUATION DE PASSAGERS

Publication
EP 3216735 A1 20170913 (EN)

Application
EP 16159692 A 20160310

Priority
EP 16159692 A 20160310

Abstract (en)
An apparatus and method for use during a power disruption to open the elevator brakes enabling the evacuation of passengers trapped in an elevator car. The apparatus comprises at least one flywheel diode (62) configured for anti-parallel arrangement with an output of the pulse electric brake opening device (PEBO). The flywheel diode (62) eliminates back EMF from the brake coil (34) permits continued circulation of current in the brake coil (34). Accordingly, on each electric pulse from the pulse electric brake opening device (PEBO) the jerk experienced by passengers within the car (4) during the manual evacuation procedure is reduced considerably but also the actual time taken to evacuate the passengers is also greatly reduced.

IPC 8 full level
B66B 1/32 (2006.01); **B66B 5/02** (2006.01)

CPC (source: EP)
B66B 1/32 (2013.01); **B66B 5/027** (2013.01)

Citation (applicant)
WO 2007094777 A2 20070823 - OTIS ELEVATOR CO [US], et al

Citation (search report)
• [Y] WO 03011735 A1 20030213 - CEAM COSTRUZIONI ELETTROMECCAN [IT], et al
• [XY] EDWARD J QUINN ET AL: "Flyback diode", 8 March 2016 (2016-03-08), Wikipedia, XP055295222, Retrieved from the Internet <URL:https://en.wikipedia.org/w/index.php?title=Special:Book&bookcmd=download&collection_id=8d12be935014194cd28a281f1f20dfeae4334660&writer=rdf2latex&return_to=Flyback+diode> [retrieved on 20160812]

Cited by
WO2020127982A1; US2021101777A1; CN113195391A; US2022055861A1; US11787661B2; EP3845480A1; WO2021136738A1

Designated contracting state (EPC)
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Designated extension state (EPC)
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