

Title (en)
DRIVING UNIT FOR RAIL VEHICLES

Publication
EP 0308616 A3 19891129 (DE)

Application
EP 88111898 A 19880723

Priority
DE 3731546 A 19870919

Abstract (en)
[origin: EP0308616A2] In a driving unit for rail vehicles having a motor gear unit which consists of a motor arranged parallel to the wheel set axle and an end wheel gearing coupled to its drive shaft, the said end wheel gearing having on the output side a hollow shaft concentrically surrounding the wheel set axle, the hollow shaft is connected to the wheel set axle solely via a single elastic coupling which permits axle displacements and axle angle deviations. In addition to the torque transmission, the coupling serves for supporting the motor gear unit. Two further support points are provided for receiving tilting moments and mass acceleration forces on the motor and/or gearing housing so that a 3-point support is present for the unit. The use of the elastic coupling for supporting weight permits a design which is space saving in comparison with known parallel drives. List of references 1 Bogie 2 Frame 3 Wheel set axle 4 Drive motor 5 End wheel gearing 6 Motor gear unit 7 Tooth coupling 8 Pinion 9 Gear wheel 10 Pinion 11 Gear wheel 12 Shaft 13 Hollow shaft 14 Housing 15 Drive wheel 16 Drive wheel 17 Joint coupling 18 First flange 19 Second flange 20 Intermediate element 21 Connecting lever 22 Connecting lever 23 Bolt 24 Longitudinal axle 25 Support point 26 Support point 27 Disc brake 28 Brake disc 29 Brake block 30 Star coupling 31 First half of coupling 32 Second half of coupling s

IPC 1-7
B61C 9/50; **B61C 9/44**

IPC 8 full level
B61C 9/44 (2006.01); **B61C 9/50** (2006.01)

CPC (source: EP)
B61C 9/44 (2013.01); **B61C 9/50** (2013.01)

Citation (search report)
• [Y] EP 0137931 A2 19850424 - HURTH MASCH ZAHNRAD CARL [DE]
• [Y] DE 838452 C 19520508 - DUESSELDORFER WAGGONFABRIK AG
• [A] DE 2451688 B1 19761008 - ORENSTEIN & KOPPEL AG
• [A] EP 0054135 A1 19820623 - THYSEN INDUSTRIE [DE]
• [A] DE 914017 C 19540624 - RUDOLF AHRENS

Cited by
DE4216586A1; CN107719387A; RU200670U1; CN105008204A; CN104802810A; KR102304283B1; US2023132924A1; US11827251B2; US9994240B2; EP3674165A1; CN111376939A; US11318965B2; WO2023186725A1; WO2023097834A1; EP3186127B1

Designated contracting state (EPC)
AT CH DE FR GB IT LI

DOCDB simple family (publication)
EP 0308616 A2 19890329; **EP 0308616 A3 19891129**; **EP 0308616 B1 19920325**; AT E74083 T1 19920415; DE 3731546 A1 19890406; DE 3869532 D1 19920430

DOCDB simple family (application)
EP 88111898 A 19880723; AT 88111898 T 19880723; DE 3731546 A 19870919; DE 3869532 T 19880723