

Title (en)
BOGIE

Title (de)
DREHGESTELL

Title (fr)
BOGGIE

Publication
EP 3689701 A1 20200805 (EN)

Application
EP 17926767 A 20171225

Priority
• CN 201710880269 A 20170926
• CN 2017118289 W 20171225

Abstract (en)
Provided is a bogie, including a framework (1), a gear box (2), a traction motor (3), a wheel pair (4), an axle (5), a six-link hollow shaft (6, 7), and a suspension cross beam (8), wherein the suspension cross beam (8) includes a beam body (81), a through groove (82) transversely provided on the beam body (81), and a bearing seat (83), which is arranged so as to transversely overhang at a groove opening at one end of the through groove (82) and which is fixedly connected to the beam body (81); one end, with the through groove (82), of the beam body (81) is fixedly connected to the traction motor (3) in a longitudinal direction, and a closed cavity formed after connection is in sleeve connection with an outer surface of the hollow shaft (6); the other end of the traction motor (3) is suspended on a middle cross beam (11) of the framework (1); one end, without the through groove (82), of the beam body (81) is hooked with a framework end beam (12); and a driven gear (21) of the gearbox (2) is in sleeve connection with the bearing seat (83) via a bearing (22). By means of elastic frame suspension of a driving device, the bogie solves the problem of the transverse instability of a heavy-duty freight electric locomotive during high-speed traveling. The gear box (2) uses a non-load structure so as to solve the problems of the gear box (2) having a complicated structure and being subject to a relatively heavy load of the gear box (2).

IPC 8 full level
B61C 9/50 (2006.01); **B61F 5/28** (2006.01)

CPC (source: CN EP)
B61C 9/44 (2013.01 - EP); **B61C 9/50** (2013.01 - CN); **B61F 5/28** (2013.01 - CN EP); **B61F 5/52** (2013.01 - CN EP);
B61F 17/30 (2013.01 - CN EP)

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 3689701 A1 20200805; **EP 3689701 A4 20210616**; **EP 3689701 B1 20230308**; CN 107697090 A 20180216; CN 107697090 B 20181106; PL 3689701 T3 20230731; RS 64202 B1 20230630; WO 2019061895 A1 20190404

DOCDB simple family (application)
EP 17926767 A 20171225; CN 201710880269 A 20170926; CN 2017118289 W 20171225; PL 17926767 T 20171225; RS P20230378 A 20171225