

Title (en)
SENSOR DEVICE FOR DETECTING A WHEEL MOVING ALONG A RAIL

Title (de)
SENSOREINRICHTUNG ZUM DETEKTIEREN EINES SICH ENTLANG EINER FAHRSCHIENE BEWEGENDEN RADES

Title (fr)
DISPOSITIF DE DÉTECTION PERMETTANT DE DÉTECTER UNE ROUE SE DÉPLAÇANT LE LONG D'UN RAIL DE ROULEMENT

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Abstract (en)
[origin: WO2017001128A1] The invention relates to a sensor device for detecting a wheel moving along a rail (60). The sensor device is equipped with two transmission coils (11, 12) on one side of the rail (60), said transmission coils being supplied with an alternating voltage and being arranged one behind the other with respect to a longitudinal direction of the rail (60), and with two receiving devices (31, 35) on the other side of the rail (60), each receiving device comprising two receiving coils (32, 33; 36, 37) which are connected together in series in opposite directions and which are arranged one behind the other with respect to the longitudinal direction of the rail (60). According to the invention, the sensor device is designed such that the sensor device has at least one additional transmission coil (13) on one side of the rail (60), said transmission coil being arranged between the transmission coils (11, 12) with respect to the longitudinal direction of the rail (60); the transmission coils (11, 12) and the at least one additional transmission coil (13) are supplied with an alternating voltage of the same frequency; and the magnetic flux (23) generated by the at least one additional transmission coil (13) is oriented opposite the magnetic fluxes (21, 22) generated by the transmission coils (11, 12).

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B61L 1/16 (2006.01)

CPC (source: EP)
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See references of WO 2017001128A1

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