

Title (en)

A TRAIN OPERATION CONTROL APPARATUS

Publication

EP 0197539 A3 19881214 (EN)

Application

EP 86104748 A 19860408

Priority

JP 7345185 A 19850409

Abstract (en)

[origin: EP0197539A2] For supplying data concerning the track condition such as a grade, a curve and so on for an automatic train control apparatus (10), there is used a magnetic card (9) which is combined with a timetable for a train operator. A card reader (8) reads out the data recorded on the card (9) necessary for traveling between a station A and the next station B when a train departs from the station A. The automatic train operation apparatus (ATO) (10) produces a notch command to a driving motor control apparatus in view of the read data. The present invention can realize the ATO flexible to the internal and external variable factors.

IPC 1-7

B61L 3/00

IPC 8 full level

B60L 15/40 (2006.01); **B61L 3/00** (2006.01)

CPC (source: EP)

B61L 15/0062 (2024.01); **B61L 15/0092** (2024.01)

Citation (search report)

- [Y] US 4179739 A 19791218 - VIRNOT ALAIN D [US]
- [Y] US 3805056 A 19740416 - BIRKIN M
- [AD] JP S5513670 A 19800130 - SANYO ELECTRIC CO
- [A] FR 2309916 A1 19761126 - MTE [FR]
- [A] WIRELESS WORLD, vol. 81, no. 1476, August 1975, pages 348-353, Hayward's Heath; W.E. ANDERTON: "Computers, communication and high speed railways"
- [A] CONTROL & INSTRUMENTATION, vol. 12, no. 3, March 1980, pages 45-49, London, GB; A. MANDEL: "People movers and the march of the microchip"

Cited by

EP0539885A3; US5602739A; CN104890533A; CN111212508A; JP2016116259A; WO9429827A1

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