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(71) Applicant: **HITACHI, LTD.**
6, Kanda Surugadai 4-chome Chiyoda-ku
Tokyo 100(JP)

(72) Inventor: **Sekino, Shinichi**
10-105 Tsukubadai Apt. 663 Ichige
Katsuta-shi Ibaraki 312(JP)

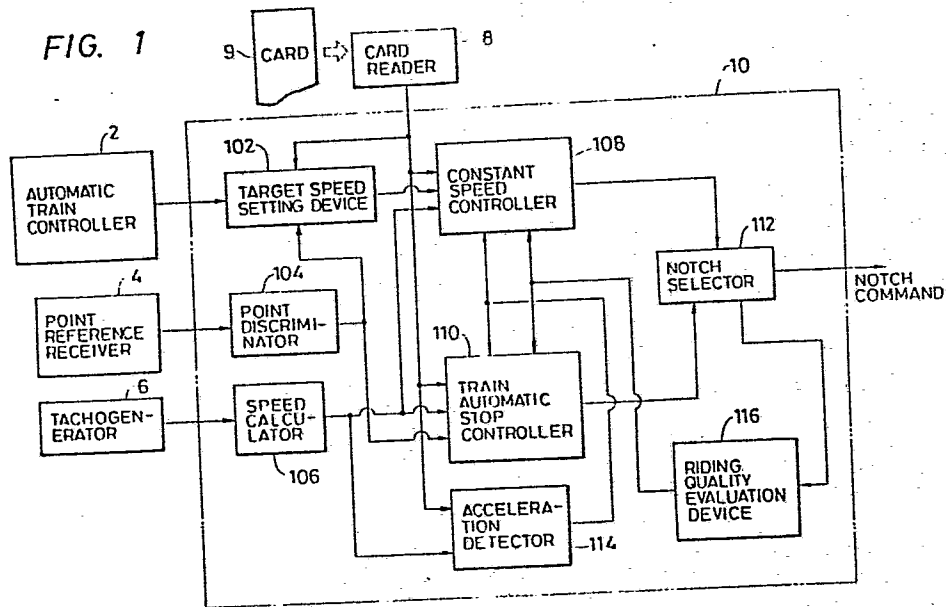
(72) Inventor: **Ohmura, Sumio**
3271-147 Nakane
Katsuta-shi Ibaraki 312(JP)

(74) Representative: **Patentanwälte Beetz sen. - Beetz jun.**
Timpe - Siegfried - Schmitt-Fumian
Steinsdorfstrasse 10
D-8000 München 22(DE)

(54) **A train operation control apparatus.**

(57) 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.

FIG. 1





European Patent
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EUROPEAN SEARCH REPORT

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Application Number

EP 86 10 4748

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.4)
Y	US-A-4 179 739 (VIRNOT) * Column 5, line 53 - column 7, line 3; figures 4,6 *	1-6	B 61 L 3/00
Y	US-A-3 805 056 (BIRKIN) * Abstract *	1-6	
A,D	JP-A-55 013 670 (SANYO) * Abstract *	1	
A	FR-A-2 309 916 (M.T.E.) * Page 1, line 28 - page 3, line 26 *	1	
A	WIRELESS WORLD, vol. 81, no. 1476, August 1975, pages 348-353, Hayward's Heath; W.E. ANDERTON: "Computers, communication and high speed railways" * Figure 3 *	1	
A	CONTROL & INSTRUMENTATION, vol. 12, no. 3, March 1980, pages 45-49, London, GB; A. MANDEL: "People movers and the march of the microchip" * Figure 1 *	1	
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int. Cl.4)
			B 61 L
Place of search		Date of completion of the search	Examiner
THE HAGUE		08-09-1988	SGURA S.
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