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**Optimal running-pattern calculating apparatus and system of the same.**

An optimal running-pattern calculating apparatus is disclosed, which comprises input means (1) for inputting line data and car data, running simulation means (3) for simulating the running of a train by using various data received from input means (4), backward curves received from backward curve calculating means (4), notch switching parameters received from parameter initializing means (10), and an upper limit speed and for calculating a running-pattern for the train to run within a restricted speed in a predetermined running distance, and time fitting means (5) for causing upper limit speed adjusting means (6) to adjust the upper limit speed and causing the running simulation means (3) to recalculate the running-pattern when the running time calculated by the running simulation time means (3) deviates from a predetermined running time.

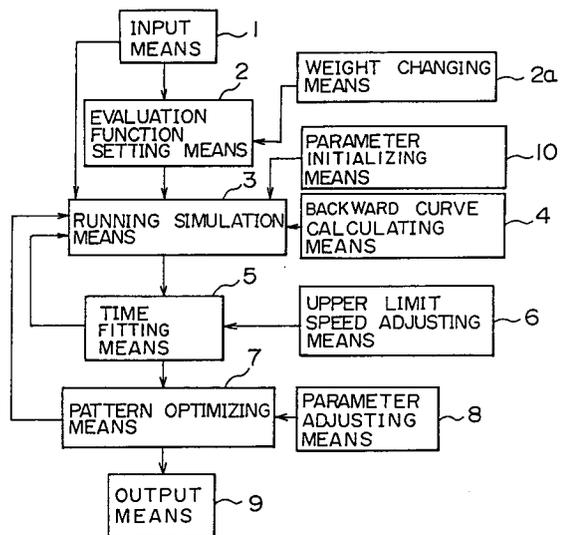


FIG. 1

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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.5)
P,X	EP-A-0 467 377 (HITACHI LTD.) * abstract; claims * ---	1-10	B61L21/00 G05B13/02 B61L3/00 B61L27/00
A	EP-A-0 114 633 (HITACHI LTD.) * abstract; claims * ---	1-10	
A	EP-A-0 197 539 (HITACHI LTD.) -----		
			TECHNICAL FIELDS SEARCHED (Int.Cl.5)
			B61L
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 29 December 1993	Examiner Reekmans, M
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