

Title (en)

Method for determining the rolling resistance of railway vehicles.

Title (de)

Verfahren zum Bestimmen des Rollwiderstandes von Eisenbahnfahrzeugen.

Title (fr)

Procédé pour la détermination de la résistance au roulement de véhicules ferroviaires.

Publication

EP 0568167 B1 19950215 (DE)

Application

EP 93250107 A 19930414

Priority

DE 4214541 A 19920429

Abstract (en)

[origin: EP0568167A1] For the online determination of the rolling resistance of a train section, the actual running path/running time behaviour of the section is recorded during freewheeling; during this process, the times when individual axles of the section pass over contacts are determined. In addition, the computational time points when the contacts are passed over are determined from the simulation of the process. If the actual running behaviour of a section deviates from its computationally calculated running behaviour, false values for the variables taken into account in a simulation model are set in the simulation model. By listing the numerical values for the influence which changes to these variables have on the computationally calculated times of passing over contacts, in a matrix and application of the orthogonalisation method to this matrix, correction values for the variables are obtained. Using these correction values, new times of passage over the contacts and new values for the influence of parameter changes are determined and, from these, new correction values are determined again for the variables. These processes are repeated until a sufficiently accurate adaptation of the computationally determined running path/running time behaviour to the appropriate running path/running time behaviour is obtained. The value of the rolling resistance which is then used for the simulation gives the actual rolling resistance of the train section in question. <IMAGE>

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