

Title (en)  
SYSTEM FOR MONITORING AND PREDICTIVE MAINTENING THE STATE OF WEAR OF MECHANICAL COMPONENTS AND OPERATION METHOD THEREOF

Title (de)  
SYSTEM ZUR ÜBERWACHUNG UND VORAUSSCHAUENDEN WARTUNG DES VERSCHLEISSZUSTANDES MECHANISCHER KOMPONENTEN UND BETRIEBSVERFAHREN DAFÜR

Title (fr)  
SYSTÈME DE SURVEILLANCE ET DE MAINTIEN PRÉDICTIF DE L'ÉTAT D'USURE DE COMPOSANTS MÉCANIQUES ET SON PROCÉDÉ DE FONCTIONNEMENT

Publication  
**EP 4008603 C0 20230830 (EN)**

Application  
**EP 21210973 A 20211129**

Priority  
IT 202000029471 A 20201202

Abstract (en)  
[origin: EP4008603A1] The present invention relates to a system (S) for monitoring and predictive maintenance of the state of wear of mechanical components of a railroad car (R), responsible for driving dynamics, of the type comprising a chassis (C), two wheel-axles (A), a bogie frame (T) and dampening (D1, D2), comprising: a logic control unit (U) comprising a signal processing program, at least one plurality of sensors (1), which can be placed on said chassis (C), wheel-axles (A), bogie frame (T) and dampening (D1, D2), capable of detecting operation data of said railroad car (R) and sending corresponding signals to said logic control unit (U), said system (S) being characterized in that said signal processing program is capable of processing said signals so as to extract real characteristic data of said mechanical components of said railroad car (R), comparing said real characteristic data with nominal theoretical values in real time, emitting an alarm signal if the result of said comparison is outside a predetermined range of values. The present invention also relates to an operating method of said system (S).

IPC 8 full level  
**B61L 15/00** (2006.01)

CPC (source: EP)  
**B61L 15/0081** (2013.01)

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Participating member state (EPC – UP)  
AT BE BG DE DK EE FI FR IT LT LU LV MT NL PT SE SI

DOCDB simple family (publication)  
**EP 4008603 A1 20220608; EP 4008603 B1 20230830; EP 4008603 C0 20230830**; ES 2959988 T3 20240229; IT 202000029471 A1 20220602; PL 4008603 T3 20240408

DOCDB simple family (application)  
**EP 21210973 A 20211129**; ES 21210973 T 20211129; IT 202000029471 A 20201202; PL 21210973 T 20211129