

Title (en)

METHOD FOR DESIGNING AND DIMENSIONING A NEW PART OF A MOTOR VEHICLE

Title (de)

VERFAHREN ZUR AUSLEGUNG UND DIMENSIONIERUNG EINES NEUTEILS EINES KRAFTFAHRZEUGS

Title (fr)

PROCÉDÉ DE CONCEPTION ET DE DIMENSIONNEMENT D'UN COMPOSANT NEUF D'UN VÉHICULE AUTOMOBILE

Publication

EP 3292489 A1 20180314 (DE)

Application

EP 16805984 A 20161111

Priority

- DE 102015120107 A 20151119
- EP 2016077485 W 20161111

Abstract (en)

[origin: WO2017084982A1] The invention relates to a method (1) for designing and dimensioning a new part (2) of a motor vehicle (3). All of the motor vehicles (5) of a motor vehicle fleet (6) have a reference part (4) with an identical structure, and the reference parts (4) and the new part (2) are of the same component type. Load spectra and damage levels of the reference parts of all the motor vehicles (5) of the motor vehicle fleet (6) are continuously ascertained on the basis of sensor and vehicle state information available in each motor vehicle (5) using specified algorithms. The load spectra and damage levels are stored in a central database (9). A reference stress on a component of the component type is ascertained regularly on the basis of the load spectra and damage levels provided in the central database (9) at a specific point in time for the reference parts (4) of all of the motor vehicles (5) of the vehicle fleet (6). The new part (2) is designed and dimensioned while taking into consideration the reference stress. The reference stress is less than the maximally occurring stress on all of the reference parts (4).

IPC 8 full level

G06F 17/50 (2006.01)

CPC (source: EP US)

G06F 30/15 (2020.01 - EP US); **G06F 30/17** (2020.01 - US); **G06F 30/333** (2020.01 - EP); **G06F 30/333** (2020.01 - US); **G06F 2119/18** (2020.01 - EP US); **Y02P 90/02** (2015.11 - EP US)

Citation (search report)

See references of WO 2017084982A1

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

DE 102015120107 A1 20170524; CN 108604255 A 20180928; EP 3292489 A1 20180314; US 2018341743 A1 20181129; WO 2017084982 A1 20170526

DOCDB simple family (application)

DE 102015120107 A 20151119; CN 201680067655 A 20161111; EP 16805984 A 20161111; EP 2016077485 W 20161111; US 201615777676 A 20161111