

Title (en)

METHOD OF MODELLING A TYRE IN RUNNING CONDITIONS AT A PREDEFINED SPEED

Title (de)

VERFAHREN ZUR MODELLIERUNG EINES REIFENS UNTER FAHRTBEDINGUNGEN BEI VORDEFINIERTER GESCHWINDIGKEIT

Title (fr)

PROCÉDÉ DE MODÉLISATION D'UN PNEUMATIQUE EN SITUATION DE ROULEMENT À UNE VITESSE DÉTERMINÉE

Publication

**EP 3011486 A1 20160427 (FR)**

Application

**EP 14759016 A 20140723**

Priority

- FR 1357693 A 20130802
- FR 2014051916 W 20140723

Abstract (en)

[origin: WO2015015097A1] The present invention relates to a method of modelling a tyre in running conditions at a predefined speed, the tyre being subjected to a downward load ( $F_z$ ) representative of a vehicle and to a transverse thrust force ( $F_y$ ) and the tyre being inclined relative to the vertical by a camber angle ( $y$ ), the method comprising the modelling of the tilting torque ( $M_x$ ) exerted on said tyre in which the tilting torque ( $M_x$ ) is the sum of at least:  
• a torque ( $M_{x1}$ ) generated by offsetting the load of the vehicle by the camber angle;  
• a torque ( $M_{x2}$ ) generated by the transverse thrust force;  
• a torque ( $M_{x3}$ ) generated by the reaction of the ground (FR) under the load ( $F_z$ ) decentred from the reference point (C) of the tyre by the transverse thrust force ( $F_y$ ).

IPC 8 full level

**G06F 17/50** (2006.01)

CPC (source: EP US)

**B60C 99/006** (2013.01 - EP US); **G06F 30/15** (2020.01 - EP US); **G06F 30/20** (2020.01 - EP US); **G06F 2111/10** (2020.01 - EP US)

Citation (search report)

See references of WO 2015015097A1

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)

**WO 2015015097 A1 20150205**; CN 105408901 A 20160316; CN 105408901 B 20180828; EP 3011486 A1 20160427; FR 3009402 A1 20150206; FR 3009402 B1 20161209; JP 2016537247 A 20161201; JP 6260701 B2 20180117; KR 101829695 B1 20180223; KR 20160036052 A 20160401; US 2016207366 A1 20160721

DOCDB simple family (application)

**FR 2014051916 W 20140723**; CN 201480042585 A 20140723; EP 14759016 A 20140723; FR 1357693 A 20130802; JP 2016530577 A 20140723; KR 20167004984 A 20140723; US 201414909500 A 20140723