

Title (en)

SOLID TYRE FOR MEASURING ROAD ADHESION OF A VEHICLE EQUIPPED THEREWITH

Title (de)

REIFEN ZUM MESSEN DER BODENHAFTUNG EINES MIT DIESEM AUSGERÜSTETEN FAHRZEUGS

Title (fr)

BANDAGE ELASTIQUE POUR MESURER L ADHERENCE D UN VEHICUL E QUI EN EST EQUIPE SUR UN SOL

Publication

EP 1578621 A2 20050928 (FR)

Application

EP 03706516 A 20030217

Priority

- EP 0301558 W 20030217
- FR 0202504 A 20020222

Abstract (en)

[origin: WO03070492A2] The invention concerns a solid tyre comprising a running tread (1) including at least a unit (3) for measuring the tyre road adhesion, the measuring unit (3) being designed to be in contact with the ground at every turn of the tyre and comprising, viewed on an outer radial surface (5) of the running tread (1), a central zone (10), a surrounding zone (20) around the central zone (10), a sensor (40) responsive to at least a tangential force exerted on the radially outer summit (11) of the central zone (10) being provided opposite the summit (11), the central zone (10) and the surrounding zone (20) fulfilling the two conditions: a) $R_{zzc} < R_{zze}$ b) (i) $R_{xzc}/R_{zzc} > R_{xze}/R_{zze}$ or (ii) $R_{yzc}/R_{zzc} > R_{yze}/R_{zze}$, wherein x, y and z represent the circumferential, axial and radial directions for the tyre, R_{zzc} and R_{zze} represent the rigidity levels of the central zone (10) and of the surrounding zone (20) at a force oriented perpendicularly to the radially outer surface (5), R_{xzc} and R_{xze} represent the rigidity levels of the central zone (10) and of the surrounding zone (20) at a force oriented tangentially to the radially outer surface (5) in the circumferential direction (X) of the tyre, and R_{yzc} and R_{yze} represent the rigidity levels of the central zone (10) and of the surrounding zone (20) at a force oriented tangentially to the radially outer surface (5) in the axial direction (Y).

IPC 1-7

B60C 11/00

IPC 8 full level

B60C 19/00 (2006.01); **B60C 11/00** (2006.01); **B60C 11/03** (2006.01); **G01N 19/02** (2006.01); **G01N 19/04** (2006.01)

CPC (source: EP KR US)

B60C 11/00 (2013.01 - EP US); **B60C 11/03** (2013.01 - EP KR US); **B60C 19/00** (2013.01 - EP US); **G01N 19/02** (2013.01 - EP KR US); **G01N 19/04** (2013.01 - EP KR US); **Y10S 152/03** (2013.01 - EP KR US); **Y10S 152/902** (2013.01 - EP KR US); **Y10T 152/10513** (2015.01 - EP US)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT SE SK TR

DOCDB simple family (publication)

WO 03070492 A2 20030828; **WO 03070492 A3 20050818**; AU 2003208861 A1 20030909; AU 2003208861 A8 20030909; BR 0307614 A 20041221; CN 1326715 C 20070718; CN 1638982 A 20050713; EP 1578621 A2 20050928; EP 1578621 A3 20051005; FR 2836418 A1 20030829; JP 2005531448 A 20051020; JP 4624677 B2 201110202; KR 20040088503 A 20041016; US 2005155685 A1 20050721; US 7377300 B2 20080527

DOCDB simple family (application)

EP 0301558 W 20030217; AU 2003208861 A 20030217; BR 0307614 A 20030217; CN 03804400 A 20030217; EP 03706516 A 20030217; FR 0202504 A 20020222; JP 2003569424 A 20030217; KR 20047012738 A 20030217; US 92055004 A 20040818