

Title (en)  
DEVICE FOR COMBINED DETECTION OF AXLE ACCELERATION AND WHEEL ROTATIONAL SPEED, AND METHOD FOR DETERMINING PRESSURE

Title (de)  
VORRICHTUNG ZUR KOMBINIERTEN ERFASSUNG DER ACHSBESCHLEUNIGUNG UND DER RADDREHZAHL SOWIE DRUCKBESTIMMUNGSVERFAHREN

Title (fr)  
DISPOSITIF DE DETECTION COMBINEE DE L'ACCELERATION D'ESSIEU ET DE LA VITESSE DE ROTATION DES ROUES, AINSI QUE PROCEDE DE DETERMINATION DE PRESSION

Publication  
**EP 1436632 A1 20040714 (DE)**

Application  
**EP 02800577 A 20020926**

Priority  
• DE 10149247 A 200111005  
• EP 0210825 W 20020926

Abstract (en)  
[origin: WO03031990A1] The pressure of a motor vehicle wheel can be determined by means of a device (1), independent of the wheel mechanically fixed to an element (2) of the body (3, 14) of the vehicle oscillating with the wheel (4). In order to determine tyre pressure, preferably absolute pressure, by combining the evaluation of data concerning the rotational speed and analysis of axle frequency, said device (1) comprises a signal preprocessing unit (6) provided with electronic components for processing sensor signals, said unit being connected to a magnetic sensor element (7) and an acceleration sensor element (8) or to a combined magnetic/acceleration sensor element (5) by an electrically conductive connection (9). The magnetic sensor element (7) or the combined magnetic/acceleration sensor element (5) is operatively connected to a magnetic encoder (16) arranged on the wheel side. In order to improve determination of characteristic quantities, the oscillating behaviour of at least two wheels (4) are analysed.

IPC 1-7  
**G01P 15/00; B60T 8/00; G01P 3/487; B60C 23/06**

IPC 8 full level  
**B60C 23/06** (2006.01); **B60G 17/0165** (2006.01); **B60G 17/019** (2006.01); **G01L 17/00** (2006.01); **G01P 3/487** (2006.01); **G01P 15/08** (2006.01); **G08C 19/02** (2006.01)

CPC (source: EP US)  
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**B60G 2400/91** (2013.01 - EP US); **B60G 2800/70** (2013.01 - EP US); **B60G 2800/702** (2013.01 - EP US); **B60G 2800/916** (2013.01 - EP US)

Citation (search report)  
See references of WO 03031990A1

Citation (examination)  
• DE 3809886 A1 19891005 - TEVES GMBH ALFRED [DE]  
• DE 19720106 A1 19981119 - TELEFUNKEN MICROELECTRON [DE]

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