

METHOD AND SYSTEM FOR MONITORING AND MEASURING WEAR AND TEAR CONDITIONS OF VEHICLE TYRES

Abstract

The invention relates to a method and system for monitoring and measuring wear and tear condition of vehicle tyres. The system comprises a typical vehicle tyre having an outer circumferential surface that comes into contact with the ground and a plurality of treads and grooves formed on the outer circumferential surface. At least one identifying means comprising a plurality of embedded RFID tag layers is disposed at the outer circumferential surface of the vehicle tyre. One of the embedded RFID tag layers is a critical embedded RFID tag layer, which corresponds with a critical depth of the treads and grooves. Wear and tear occurs to both the tyre and the identifying means during use of the tyre. When the depth of the plurality of treads and grooves is reduced to the critical depth due to wear and tear, a change of tyre is necessary. An RFID transceiver, for receiving signals from the embedded RFID tag layers that are not worn out or damaged, is connected to a computer which sends an alarm when the RFID transceiver is unable to receive a signal from the critical embedded RFID tag layer. The driver is also able to determine the wear and tear condition or measure the wear and tear condition of the tyre from the signals received by the transceiver.

[0001] FIG. 3 and 4 accompany the abstract.