

Title (en)

SYSTEM FOR INTRINSICALLY SAFE DETECTION OF A WHEEL ROTATIONAL SPEED

Title (de)

ANORDNUNG ZUR EIGENSICHEREN RADDREHZAHLERFASSUNG

Title (fr)

SYSTEME DE DETECTION DE LA VITESSE DE ROTATION D'UNE ROUE A SECURITE INTRINSEQUE

Publication

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Application

EP 06755232 A 20060517

Priority

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Abstract (en)

[origin: WO2006122945A1] The invention relates to a system for detecting the rotational speed of a wheel or another rotating body with a sensor (1, 6), in particular, an active sensor (1), coupled with an encoder (23) by means of a magnetic field, which rotates with the rotating body, in particular, for the automotive industry. If, on the known systems, the air gap between the sensor device (S1, S2) and the encoder (23) is too small, then flipping and thus a duplication of the measured rotational speed of the wheel can happen and lead to problems in safety devices of the vehicle, which need a correct indication of the wheel rotational speed for proper operation. The aim of said invention is to improve tolerance on the fitting position of the known systems. Said aim is achieved, whereby the use of two separate signal paths (S1, f1; S2, f2) is provided, which comprise sensor devices (S1, S2) with a different sensitivity. The signal paths (S1, f1; S2, f2) are embodied, so that a signal path (S1, f1) with the highest sensitivity is always available, so that, in the normal undisturbed case, minimal optical distortions of the encoder track (13) for maximal air gaps are obtained, while simultaneously a monitoring signal path (S2, f2) is always available, the sensitivity of which is such that flipping is safely avoided in all magnetic conditions.

IPC 8 full level

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Citation (examination)

- DE 19538163 C1 19970327 - WEHRLE E GMBH [DE]
- CH 448753 A 19671215 - LICENTIA GMBH [DE]
- US 6154025 A 20001128 - SCHELTER WOLFGANG [DE], et al

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DE FR

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DOCDB simple family (application)

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