

Title (en)  
SENSING DEVICE

Title (de)  
SENSORVORRICHTUNG

Title (fr)  
DISPOSITIF CAPTEUR

Publication  
**EP 2564216 A1 20130306 (EN)**

Application  
**EP 10726608 A 20100428**

Priority  
• JP 2010057920 W 20100428  
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Abstract (en)  
[origin: WO2010150416A1] The present invention discloses a speed and movement direction sensing device. The sensing device includes an incremental encoder, which generates three pulses shifted with 120 (electrical) degrees. A speed signal generation section receives the encoder signals and generates a pulse signal, which frequency is proportional with the frequency of the input signal. The encoder self-test section monitors the encoder states and detects encoder error based on the encoder signals and a direction detection section generates a direction signal based on the encoder pulses. The sensing device allows encoder self-test even in case of zero speed. The fault-tolerant speed and movement direction sensing device offers a higher reliability than the prior art and can be applied in motion control systems where high safety and integrity level is required.

IPC 8 full level  
**G01P 13/04** (2006.01); **B66B 1/34** (2006.01); **G01D 5/244** (2006.01); **G01P 3/489** (2006.01); **G01P 21/02** (2006.01)

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Citation (search report)  
See references of WO 2010150596A1

Citation (examination)  
EP 1672324 A1 20060621 - NSK LTD [JP], et al

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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 SE SI SK SM TR

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