

Title (en)

METHOD AND DEVICE FOR THE DETECTION OF LOCAL DISPLACEMENTS AND ROTATIONS

Title (de)

VERFAHREN UND VORRICHTUNG ZUR ERFASSUNG VON ORTSVERSCHIEBUNGEN UND DREHBEWEGUNGEN

Title (fr)

PROCEDE ET DISPOSITIF POUR LA DETECTION DE DEPLACEMENTS LOCAUX ET DE ROTATIONS

Publication

EP 1499901 A2 20050126 (DE)

Application

EP 03720477 A 20030416

Priority

- DE 10217435 A 20020418
- EP 0303947 W 20030416

Abstract (en)

[origin: WO03087845A2] Disclosed is a method for the detection of local displacements and rotations, wherein a sum signal and additionally a difference signal are formed from two separately generated signals of two transformer elements (W1, W2) which are distanced from each other, whereupon the sum signal and the formed difference signal are OR operated. Also disclosed is a moving incremental scale local frequency doubling device. Said device comprises an encoder (1a, 1b, 1c), a magnetically sensitive converter (9, 13) and a signal conditioning stage (6a,6b) electrically connected thereto. The transformer comprises at least two sensorially active functional groups contemporaneously using sensorially active groups or sub-groups (W1, W2) which are locally offset in relation to each other by a local phase F in order to scan the moving scale and the functional groups comprise means enabling at least two independent partial signals $S1 = V \cdot \sin(O \cdot t)$ and $S2 = -V \cdot \sin(O \cdot t + F)$ to be produced.

IPC 1-7

G01P 3/481; **G01P 3/489**; **G01D 5/244**

IPC 8 full level

G01D 5/244 (2006.01); **G01D 5/245** (2006.01); **G01P 3/481** (2006.01); **G01P 3/489** (2006.01)

CPC (source: EP KR US)

G01P 3/481 (2013.01 - EP KR US); **G01P 3/487** (2013.01 - KR); **G01P 3/489** (2013.01 - EP US)

Citation (search report)

See references of WO 03087845A2

Designated contracting state (EPC)

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

DOCDB simple family (publication)

WO 03087845 A2 20031023; **WO 03087845 A3 20040219**; CN 100439921 C 20081203; CN 1646921 A 20050727; DE 10391610 D2 20050127; EP 1499901 A2 20050126; JP 2005523436 A 20050804; JP 4410566 B2 20100203; KR 20040102113 A 20041203; US 2005179429 A1 20050818; US 7170280 B2 20070130

DOCDB simple family (application)

EP 0303947 W 20030416; CN 03808466 A 20030416; DE 10391610 T 20030416; EP 03720477 A 20030416; JP 2003584737 A 20030416; KR 20047016612 A 20030416; US 51085604 A 20041012