

Title (en)
SENSOR SYSTEM FOR DETECTING LOADS ON METAL CUSHIONS

Title (de)
SENSORIK ZUR LASTERFASSUNG AN METALLKISSEN

Title (fr)
SYSTÈME DE CAPTEUR POUR DÉTECTER DES CHARGES SUR DES COUSSINS MÉTALLIQUES

Publication
EP 4327061 A1 20240228 (DE)

Application
EP 22723609 A 20220419

Priority
• DE 102021203858 A 20210419
• EP 2022060314 W 20220419

Abstract (en)
[origin: WO2022223560A1] The invention relates to a sensor (1) for detecting mechanical loads, comprising: - a metal cushion (2) positioned between a first and a second attachment part (3), wherein the attachment parts (3) are designed to allow a mechanical deformation of the metal cushion (2) by means of loads, - at least one insulation layer (4) which is designed to externally insulate the metal cushion (2), - a measurement unit (7) for measuring a change in an electrical impedance of the metal cushion (2), and - at least two contact units (6) which electrically contact the metal cushion (2) at at least two different points and which connect the metal cushion to the measurement unit (7) such that loads can be detected on the basis of the change in the impedance of the metal cushion (2) caused by the deformation of the metal cushion (2).

IPC 8 full level
G01L 1/14 (2006.01); **G01L 1/20** (2006.01); **G01L 5/1623** (2020.01); **G01L 5/164** (2020.01)

CPC (source: EP)
G01L 1/14 (2013.01); **G01L 1/20** (2013.01); **G01L 5/1623** (2020.01); **G01L 5/164** (2013.01)

Designated contracting state (EPC)
AL 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 RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

Designated validation state (EPC)
KH MA MD TN

DOCDB simple family (publication)
DE 102021203858 A1 20221020; **DE 102021203858 B4 20230316**; EP 4327061 A1 20240228; WO 2022223560 A1 20221027

DOCDB simple family (application)
DE 102021203858 A 20210419; EP 2022060314 W 20220419; EP 22723609 A 20220419