

Title (en)

FORCE SENSOR COMPRISING ORGANIC FIELD EFFECT TRANSISTORS AND PRESSURE SENSOR, POSITION SENSOR AND FINGERPRINT SENSOR THAT ARE BASED ON SAID FORCE SENSOR

Title (de)

KRAFTSENSOR MIT ORGANISCHEN FELDEFFEKTTTRANSISTOREN, DARAUF BERUHENDER DRUCKSENSOR, POSITIONSSENSOR UND FINGERABDRUCKSENSOR

Title (fr)

CAPTEUR DE FORCE COMPORTANT DES TRANSISTORS A EFFET DE CHAMP ORGANIQUES, ET CAPTEUR DE PRESSION, CAPTEUR DE POSITION ET CAPTEUR D'EMPREINTES DIGITALES REALISES A BASE DE CE CAPTEUR DE FORCE

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Application

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Priority

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Abstract (en)

[origin: WO2005096348A2] The invention relates to a force sensor based on an organic field effect transistor (10) that is applied to a substrate (1; 11). According to the invention, a mechanical force that acts on the transistor causes a corresponding modification of the source-drain voltage or the source-drain current (ID), whereby said modification can be respectively detected as a measured variable (Vmess, Imess) for the exerted force. The invention also relates to a membrane-based pressure sensor that uses a force sensor of this type, to a one- or two-dimensional position sensor that uses a plurality of force sensors of this type and to a fingerprint sensor that uses a plurality of force sensors of this type.

IPC 8 full level

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