Title (en)

SURFACE CAPACITANCE SENSOR SYSTEM USING BURIED STIMULUS ELECTRODE

Title (de)

OBERFLÄCHENKAPAZITÄTSSENSORSYSTEM MIT VERGRABENER STIMULUS-ELEKTRODE

Title (fr)

SYSTEME DE DETECTION DE LA CAPACITE DE SURFACE UTILISANT UNE ELECTRODE DE STIMULI NOYEE

Publication

EP 1412765 A4 20080206 (EN)

Application

EP 02737174 A 20020522

Priority

- US 0216533 W 20020522
- US 29285801 P 20010522

Abstract (en)

[origin: WO02095439A2] A surface capacitance sensor system is implemented as an array of sensor electrodes near the surface of the integrated circuit and an array of stimulus electrodes below the sensor electrodes. Rows of stimulus electrodes are driven by sources while the voltages at the respective sensor electrodes are measured. Voltage measurements at each sensor electrode allow the surface capacitance at each sensor electrode location to be determined. The capacitance data is used to determine the positions of target electrodes above the array surface as required in the location fingerprint artifacts.

[origin: WO02095439A2] A surface capacitance sensor system is implemented as an array of sensor electrodes (21-23, 31-33, 41-43) near the surface of the integrated circuit and an array of stimulus electrodes below the sensor electrodes. Rows of stimulus electrodes are driven by sources (12, 13) while the voltages at the respective sensor electrodes are measured. Voltage measurements (16) at each sensor electrode allow the surface capacitance at each sensor electrode location to be determined. The capacitance data is used to determine the positions of target electrodes above the array surface as required in the location fingerprint artifacts.

IPC 1-7

G01R 27/02; G01R 27/26

IPC 8 full level

G01B 7/28 (2006.01); **G06K 9/00** (2006.01)

CPC (source: EP)

G06V 40/1306 (2022.01)

Citation (search report)

- [X] EP 0791899 A2 19970827 - HARRIS CORP [US]
- [X] US 4353056 A 19821005 - TSIKOS CONSTANTINE
- [X] US 4526043 A 19850702 - BOIE ROBERT A [US], et al
- [X] US 5010772 A 19910430 - BOURLAND JOE D [US], et al
- [X] US 5325442 A 19940628 - KNAPP ALAN G [GB]
- See references of WO 02095439A2

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

WO 02095439 A2 20021128; **WO 02095439 A3 20030501**; AU 2002310124 A1 20021203; EP 1412765 A2 20040428; EP 1412765 A4 20080206; JP 2004528572 A 20040916; JP 4102672 B2 20080618; TW I225932 B 20050101

DOCDB simple family (application)

US 0216533 W 20020522; AU 2002310124 A 20020522; EP 02737174 A 20020522; JP 2002591858 A 20020522; TW 91110792 A 20020522