

Title (en)

HAPTIC-FEEDBACK TOUCH DEVICE WITH SPATIALIZED TEXTURES

Title (de)

BERÜHRUNGSVORRICHTUNG MIT HAPTISCHEM FEEDBACK MIT VERRÄUMLICHEN TEXTUREN

Title (fr)

DISPOSITIF TACTILE À RETOUR HAPTIQUE AVEC TEXTURES SPATIALISÉES

Publication

**EP 4232883 A1 20230830 (FR)**

Application

**EP 21798681 A 20211022**

Priority

- FR 2010955 A 20201026
- EP 2021079404 W 20211022

Abstract (en)

[origin: WO2022090090A1] Method for implementing a touch device (1), the touch device (1) comprising: - a panel (10), comprising at least one texturization area (10') to which a texturization pattern (M, M1, M2) is assigned, the panel being intended to be touched by an external body; - at least one transducer (12), configured so as to set the panel (10) in vibration at an ultrasonic vibration frequency, the transducer being configured so as to be controlled by an activation signal; the method comprising: a) moving an external body (9) along the texturization area (10'); b) determining a position (S(t)) of the external body on the texturization area (10'); c) measuring a speed (V(t)) of the external body along the panel; d) when the external body moves along the texturization area, generating an activation signal (Act(t)), so as to activate the transducer (12) or each transducer; the method being characterized in that: the texturization pattern is oriented with respect to a reference axis; step c) comprises: • taking into consideration a reference axis (R); • measuring a component of the speed (VR) of the external body along the reference axis; during step d), the activation signal depends on the texturization pattern and on the component of the speed of the external body on the reference axis.

IPC 8 full level

**G06F 3/01** (2006.01)

CPC (source: EP KR US)

**G06F 3/016** (2013.01 - EP KR US); **G06F 3/041** (2013.01 - KR); **G06F 3/0414** (2013.01 - US); **G06F 3/0447** (2019.05 - US);  
**G06F 3/0488** (2013.01 - US); **G06F 2203/014** (2013.01 - US)

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)

**FR 3115617 A1 20220429; FR 3115617 B1 20230623**; CN 116802591 A 20230922; EP 4232883 A1 20230830; JP 2023546625 A 20231106;  
KR 20230091158 A 20230622; US 11914783 B2 20240227; US 2023393658 A1 20231207; WO 2022090090 A1 20220505

DOCDB simple family (application)

**FR 2010955 A 20201026**; CN 202180086997 A 20211022; EP 2021079404 W 20211022; EP 21798681 A 20211022;  
JP 2023525542 A 20211022; KR 20237017418 A 20211022; US 202118250722 A 20211022