

Title (en)
FIELD EFFECT TRANSISTOR WITH SOURCE-CONNECTED FIELD PLATE

Title (de)
FELDEFFEKTTRANSISTOR MIT SOURCE-VERBUNDENER FELDPLATTE

Title (fr)
TRANSISTOR À EFFET DE CHAMP AVEC PLAQUE DE CHAMP CONNECTÉE À UNE SOURCE

Publication
EP 4342001 A1 20240327 (EN)

Application
EP 22805561 A 20220520

Priority
• US 202117325666 A 20210520
• US 2022030233 W 20220520

Abstract (en)
[origin: WO2022246182A1] A transistor device includes a semiconductor layer, source and drain contacts on the semiconductor layer, a gate contact on the semiconductor layer between the source and drain contacts, and a field plate over the semiconductor layer between the gate contact and the drain contact. The transistor device includes a first electrical connection between the field plate and the source contact that is outside an active region of the transistor device, and a second electrical connection between the field plate and the source contact.

IPC 8 full level
H01L 29/778 (2006.01)

CPC (source: EP KR)
H01L 29/2003 (2013.01 - KR); **H01L 29/402** (2013.01 - EP); **H01L 29/404** (2013.01 - EP KR); **H01L 29/41758** (2013.01 - KR);
H01L 29/66462 (2013.01 - EP KR); **H01L 29/7786** (2013.01 - EP KR); **H01L 29/2003** (2013.01 - EP); **H01L 29/41766** (2013.01 - EP)

Citation (search report)
See references of WO 2022246182A1

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)
WO 2022246182 A1 20221124; EP 4342001 A1 20240327; JP 2024519369 A 20240510; KR 20240005063 A 20240111

DOCDB simple family (application)
US 2022030233 W 20220520; EP 22805561 A 20220520; JP 2023571532 A 20220520; KR 20237042202 A 20220520