

Title (en)

METHOD FOR DEPOSITING AN EPITAXIAL LAYER ON A FRONT SIDE OF A SEMICONDUCTOR WAFER, AND DEVICE FOR CARRYING OUT THE METHOD

Title (de)

VERFAHREN ZUM ABSCHIEDEN EINER EPITAKTISCHEN SCHICHT AUF EINER VORDERSEITE EINER HALBLEITERSCHEIBE UND VORRICHTUNG ZUR DURCHFÜHRUNG DES VERFAHRENS

Title (fr)

PROCÉDÉ DE SÉPARATION D'UNE COUCHE ÉPITAXIALE SUR UNE FACE AVANT D'UNE TRANCHE DE MATÉRIAU SEMI-CONDUCTEUR ET DISPOSITIF D'EXÉCUTION DU PROCÉDÉ

Publication

EP 3976853 A1 20220406 (DE)

Application

EP 20722575 A 20200429

Priority

- DE 102019207772 A 20190528
- EP 2020061882 W 20200429

Abstract (en)

[origin: WO2020239347A1] The invention relates to a device for depositing an epitaxial layer on a front side of a semiconductor wafer with an orientation notch, comprising a unit for holding and rotating a susceptor with a susceptor support shaft and susceptor support arms; and a ring, which is held by the susceptor support arms and has inwardly pointing protrusions; and the susceptor, comprising a susceptor ring with a support face for supporting the semiconductor wafer in the edge region of a rear side of the semiconductor wafer and a stepped outer delimitation of the susceptor ring, which delimitation is adjacent to the support face, the support face having an inwardly pointing protrusion.

IPC 8 full level

C23C 16/458 (2006.01); **C30B 25/12** (2006.01)

CPC (source: CN EP IL KR US)

C23C 16/4584 (2013.01 - CN US); **C23C 16/4585** (2013.01 - EP IL KR); **C23C 16/46** (2013.01 - US); **C30B 25/105** (2013.01 - US); **C30B 25/12** (2013.01 - CN EP IL KR US); **H01L 21/0262** (2013.01 - US); **H01L 21/68764** (2013.01 - US); **H01L 23/544** (2013.01 - US); **H01L 2223/54493** (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

DOCDB simple family (publication)

WO 2020239347 A1 20201203; CN 112011826 A 20201201; CN 112011826 B 20231013; CN 113950541 A 20220118; CN 113950541 B 20240611; CN 213538160 U 20210625; DE 102019207772 A1 20201203; EP 3976853 A1 20220406; IL 288289 A 20220101; JP 2022534935 A 20220804; JP 7532417 B2 20240813; KR 20220006604 A 20220117; SG 11202112702X A 20211230; TW 202044354 A 20201201; TW I751564 B 20220101; US 11982015 B2 20240514; US 2022267926 A1 20220825

DOCDB simple family (application)

EP 2020061882 W 20200429; CN 202010468199 A 20200528; CN 202020959180 U 20200528; CN 202080039437 A 20200429; DE 102019207772 A 20190528; EP 20722575 A 20200429; IL 28828921 A 20211122; JP 2021570424 A 20200429; KR 20217040320 A 20200429; SG 11202112702X A 20200429; TW 109117361 A 20200525; US 202017614214 A 20200429