

Title (en)

METHOD FOR PRODUCING A COMPONENT ASSEMBLY FOR A PACKAGE, METHOD FOR PRODUCING A PACKAGE HAVING A COMPONENT ASSEMBLY, COMPONENT ASSEMBLY, AND PACKAGE

Title (de)

VERFAHREN ZUM HERSTELLEN EINER BAUTEILANORDNUNG FÜR EIN PACKAGE, VERFAHREN ZUM HERSTELLEN EINES PACKAGES MIT EINER BAUTEILANORDNUNG, BAUTEILANORDNUNG UND PACKAGE

Title (fr)

PROCÉDÉ DE FABRICATION D'UN AGENCEMENT DE COMPOSANTS POUR UN BOÎTIER, PROCÉDÉ DE FABRICATION D'UN BOÎTIER CONTENANT UN AGENCEMENT DE COMPOSANTS, AGENCEMENT DE COMPOSANTS ET BOÎTIER

Publication

EP 3987326 A1 20220427 (DE)

Application

EP 20737085 A 20200622

Priority

- DE 102019116920 A 20190624
- DE 102019118797 A 20190711
- DE 2020100529 W 20200622

Abstract (en)

[origin: WO2020259755A1] The invention relates to a method for producing a component assembly for a package, said method comprising: providing a wafer (1) made of a semiconductor material having a polished wafer surface (6); forming an opening (2,3) in the wafer (1) by means of anisotropic etching, wherein an anisotropically etched surface (4) is produced in the region of the opening (2,3); dicing a component (9) from the anisotropically etched wafer, wherein the diced component (9) is produced with the following areas: an optical area (7) which is formed in the region of a surface portion of the polished wafer surface (6), and a mounting area (5) which is formed in the region of the anisotropically etched surface (4); and mounting the diced component (9) on a substrate surface (11) of a carrier substrate (12), using the mounting area (5), such that the anisotropically etched surface (4) is bonded to the substrate surface (11), wherein the optical area (7) is arranged as an inclined, exposed area. A component assembly and a package having a component assembly are also provided.

IPC 8 full level

G02B 5/08 (2006.01); **H01S 5/022** (2021.01)

CPC (source: CN EP KR US)

G02B 5/0808 (2013.01 - KR); **H01L 21/02019** (2013.01 - US); **H01L 21/78** (2013.01 - US); **H01S 5/02208** (2013.01 - KR); **H01S 5/02255** (2021.01 - CN EP KR); **H01S 5/02325** (2021.01 - KR); **H01S 5/02326** (2021.01 - CN); **H01S 5/02345** (2021.01 - KR); **H01S 5/0239** (2021.01 - CN); **G02B 5/0808** (2013.01 - EP); **H01L 2224/48091** (2013.01 - EP KR); **H01L 2224/48227** (2013.01 - EP KR); **H01S 5/02208** (2013.01 - EP); **H01S 5/02325** (2021.01 - EP); **H01S 5/02345** (2021.01 - EP)

C-Set (source: EP)

H01L 2224/48091 + **H01L 2924/00014**

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)

DE 102019118797 A1 20201224; **DE 102019118797 B4 20230112**; CN 114008876 A 20220201; EP 3987326 A1 20220427; JP 2022539450 A 20220909; KR 20220024776 A 20220303; TW 202101619 A 20210101; US 2022415645 A1 20221229; WO 2020259755 A1 20201230

DOCDB simple family (application)

DE 102019118797 A 20190711; CN 202080045827 A 20200622; DE 2020100529 W 20200622; EP 20737085 A 20200622; JP 2021575462 A 20200622; KR 20227002001 A 20200622; TW 109121743 A 20200624; US 202017618920 A 20200622