

Title (en)

ASSEMBLY FOR AN ANTENNA FOR GENERATING OR RECEIVING TERAHERTZ RADIATION, ANTENNA, TERAHERTZ SYSTEM, AND METHOD FOR PRODUCING AN ASSEMBLY FOR AN ANTENNA

Title (de)

ANORDNUNG FÜR EINE ANTENNE ZUM ERZEUGEN ODER EMPFANGEN VON TERAHERTZ-STRAHLUNG, ANTENNE, TERAHERTZSYSTEM SOWIE VERFAHREN ZUR HERSTELLUNG EINER ANORDNUNG FÜR EINE ANTENNE

Title (fr)

ENSEMBLE POUR UNE ANTENNE DESTINÉE À GÉNÉRER OU RECEVOIR UN RAYONNEMENT TÉRAHERTZ, ANTENNE, SYSTÈME TÉRAHERTZ ET PROCÉDÉ DE FABRICATION D'UN ENSEMBLE POUR UNE ANTENNE

Publication

EP 4147278 A1 20230315 (DE)

Application

EP 21723262 A 20210505

Priority

- EP 20173549 A 20200507
- EP 2021061881 W 20210505

Abstract (en)

[origin: WO2021224336A1] The invention relates to an assembly (1) for an antenna (16, 17) for generating or receiving terahertz radiation (12), comprising: - a photoactive layer (2) which can be activated by an optical radiation (11) ranging from 1200 nm to 1700 nm, - a substrate (3) which is transparent to the optical radiation (11) and on which the photoactive layer (2) is secured, - a first adhesive layer (4), wherein the first adhesive layer (4) is arranged between the photoactive layer (2) and the substrate (3) and connects the surface of the layer and the surface of the substrate together, and the first adhesive layer (4) has a thickness of maximally 5 µm, and - a support (5) which is transparent to the optical radiation (11). The substrate (3) is secured on the support (5) and is arranged between the photoactive layer (2) and the support (5), and the substrate (3) and the support (5) are made of the same material. The invention additionally relates to an antenna (16, 17), a terahertz system (20), and a method for producing the aforementioned assembly (1).

IPC 8 full level

H01L 31/0232 (2006.01); **G01N 21/3581** (2014.01); **H01L 31/0304** (2006.01); **H01L 31/101** (2006.01); **H01L 31/18** (2006.01); **H01Q 1/22** (2006.01); **H01Q 5/22** (2015.01); **H01Q 15/08** (2006.01)

CPC (source: EP US)

H01L 31/02325 (2013.01 - EP US); **H01L 31/03046** (2013.01 - EP); **H01L 31/101** (2013.01 - EP US); **H01L 31/1892** (2013.01 - EP US); **H01Q 1/2283** (2013.01 - EP); **H01Q 5/22** (2015.01 - EP 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)

EP 3907764 A1 20211110; EP 4147278 A1 20230315; JP 2023524759 A 20230613; US 2024136460 A1 20240425; US 2024234615 A9 20240711; WO 2021224336 A1 20211111

DOCDB simple family (application)

EP 20173549 A 20200507; EP 2021061881 W 20210505; EP 21723262 A 20210505; JP 2022567210 A 20210505; US 202117998096 A 20210505