

Title (en)

UV Emitter Module and Use Thereof

Title (de)

UV-STRAHLERMODUL UND DESSEN VERWENDUNG

Title (fr)

MODULE ÉMETTEUR D'UV ET UTILISATION DUDIT MODULE

Publication

EP 3749892 A1 20201216 (DE)

Application

EP 18825585 A 20181210

Priority

- DE 102018102928 A 20180209
- EP 2018084078 W 20181210

Abstract (en)

[origin: WO2019154542A1] Known UV emitter modules for irradiating a substrate with ultraviolet radiation have a watertight housing which surrounds a UV emitter module for irradiating a substrate with ultraviolet radiation, which comprises a plurality of low-pressure mercury lamps each having a longitudinal axis, and which has an underside, an upper side and at least two side walls connecting the underside and the upper side, and, on the underside, a radiation exit opening closed off by a radiation exit window. Proceeding from this basis, in order to achieve an improvement in respect of the observance of hygiene standards and at the same time in respect of homogeneity and compactness, according to the invention a first air-guiding zone for the feeding of cooling air and a second air-guiding zone, separate from the first air-guiding zone, for the discharging of heated cooling air are formed in the housing. The radiation exit window, the emitter arrangement and the air-guiding zones are arranged in succession in a cross-section through the housing perpendicular to the longitudinal axes of the low-pressure mercury lamps and as seen in a viewing direction from the underside to the upper side. The first air-guiding zone is equipped with an inflow channel having at least one air-steering means for feeding cooling air to the emitter arrangement.

IPC 8 full level

F21V 29/83 (2015.01); **H01J 61/20** (2006.01)

CPC (source: CN EP KR US)

A61L 2/10 (2013.01 - EP KR US); **F21V 29/83** (2013.01 - CN); **H01J 61/20** (2013.01 - CN); **H01J 61/523** (2013.01 - EP KR US);
H01J 61/72 (2013.01 - EP KR US); **A61L 2202/11** (2013.01 - KR)

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 102018102928 A1 20190814; CN 111684204 A 20200918; CN 111684204 B 20230317; CN 116241851 A 20230609;
EP 3749892 A1 20201216; JP 2021512707 A 20210520; JP 2023089088 A 20230627; JP 7260554 B2 20230418; KR 102645974 B1 20240308;
KR 20200120905 A 20201022; US 11547770 B2 20230110; US 11857686 B2 20240102; US 2021361792 A1 20211125;
US 2023139861 A1 20230504; WO 2019154542 A1 20190815

DOCDB simple family (application)

DE 102018102928 A 20180209; CN 201880088731 A 20181210; CN 202310246487 A 20181210; EP 18825585 A 20181210;
EP 2018084078 W 20181210; JP 2020542444 A 20181210; JP 2023062349 A 20230406; KR 20207021527 A 20181210;
US 201816961708 A 20181210; US 202218089990 A 20221228