Title (en)

Irradiation device

Title (de)

Bestrahlungseinrichtung

Title (fr)

Dispositif de rayonnement

Publication

EP 2151278 A1 20100210 (DE)

Application

EP 09012870 A 20070516

Priority

- EP 07725318 A 20070516
- DE 102006028702 A 20060622

Abstract (en)

The irradiation device for treating lacquer coatings, surface textures or printing inks using electromagnetic radiation, comprises elongated radiators for emitting radiation in or between UV- and IR region, main reflector parts from metal sheet curved or folded in a shape, which is adaptable to the shape of the radiators, and a multi-part radiator housing having a radiator holding part (3) and a detachably attached air cooler part (5). The reflector parts are formed as separate main reflectors (27) and are individually demountable and independently mounted from the radiators. The irradiation device for treating lacquer coatings, surface textures or printing inks using electromagnetic radiation, comprises elongated radiators for emitting radiation in or between UV- and IR region, main reflector parts from metal sheet curved or folded in a shape, which is adaptable to the shape of the radiators, and a multi-part radiator housing having a radiator holding part (3) and a detachably attached air cooler part (5). The reflector parts are formed as separate main reflectors (27) and are individually demountable and independently mounted from the radiators. The main reflectors have a length corresponding to the length of a linear section of the radiator. Base-plate sections of the radiator are arranged at the end of the main reflectors. The main reflectors are fastened to the radiator housing by means of a locking- or a clamp connection and have W- or V-profile inscribed in a cuboid-form. The radiators have base-plates on the side opposite to the line of its longitudinal direction and end-reflector (23) sections are assigned to the base-plates, which are curved or folded from metal sheet. The end-reflectors clamped in the radiator housing are formed separately from the main reflectors. The radiators are formed as near-infrared radiators (9) with a radiator body, which is turned to the base-plate with continuous filaments. The end-reflectors have reflector walls with adaptable trough-shape with variable heights and/or different slant. The radiator housing has a channel for reception of a protect plate. The channel is stretched from the top edge of the main reflectors and optional end-reflectors. First cool air passage is formed between the main reflectors and the radiator housing. In the end-reflector a second cool air passages is formed for the cooling of the radiators. The radiator holding part and the air cooler part are designed in the cuboid-form with corresponding length and breadth. The air-cooler part includes an air blower and has a first- and second main surface, which are opposite to each other. The radiator holding part and an air filter plate (7) are mounted on the first and second main surface respectively. A conical or funnel shaped wall section is intended between the blower fans and the air filter plate, is formed as the frustum of a pyramid and flows towards the blower fans. The air cooler part has an air channel connection for an external blower fan and the first and second main surface. The holding part is mounted on the first main surface and the second main surface is closed. Frames for sockets of the radiator are intended in the radiator holding part and through which fixation tools are fixed in the air cooler part and are electrically attached over supply lines flowing in the air cooler part.

Abstract (de)

Bestrahlungseinrichtung für den technischen Einsatz, mit einer Mehrzahl von lang gestreckten, in oder zwischen dem UV- und IR-Bereich emittierenden Strahlern und einer Mehrzahl von Hauptreflektorabschnitten, die aus Metallblech in einer an die Form der Strahler angepassten Form gebogen und/oder abgekantet sind, insbesondere nach einem der vorangehenden Ansprüche, mit einem mehrteiligen, mindestens zum überwiegenden Teil aus Metallblech bestehenden Strahlergehäuse, welches einen Strahlerhalterungs-Teil und einen mit diesem lösbar verbundenen Luftkühler-Teil aufweist, wobei im Strahlerhalterungs-Teil Fassungen für Sockel der Strahler vorgesehen sind, welche durch im Luftkühler-Teil angeordnete Fixierungsmittel fixiert und über im Luftkühler-Teil verlaufende Zuleitungen elektrisch angeschlossen sind.

IPC 8 full level

B01J 19/12 (2006.01); **F26B 3/28** (2006.01); **F26B 3/30** (2006.01); **H05B 3/00** (2006.01); **H05B 3/50** (2006.01)

CPC (source: EP US)

F26B 3/28 (2013.01 - EP US); **H05B 3/008** (2013.01 - EP US); **H05B 3/50** (2013.01 - EP US); H05B 2203/032 (2013.01 - EP US)

Citation (applicant)

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Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK RS

DOCDB simple family (publication)

DE 102006028702 A1 20071227; **DE 102006028702 B4 20090625**; EP 2029270 A1 20090304; EP 2029270 B1 20120801; EP 2151278 A1 20100210; EP 2151278 B1 20160302; US 2009184267 A1 20090723; US 8097867 B2 20120117; WO 2007147466 A1 20071227

DOCDB simple family (application)

DE 102006028702 A 20060622; EP 07725318 A 20070516; EP 09012870 A 20070516; EP 2007004403 W 20070516; US 30329407 A 20070516