

Title (en)
DEVICE FOR PRODUCING A SINGLET OXYGEN BY IRRADIATING A LIGHT- SENSITIVE MATERIAL

Title (de)
VORRICHTUNG ZUR HERSTELLUNG EINES SINGULETT-SAUERSTOFFS DURCH BESTRAHLUNG EINES LICHTEMPFINDLICHEN MATERIALS

Title (fr)
DISPOSITIF DE PRODUCTION D'UN OXYGÈNE SINGULET PAR IRRADIATION D'UNE MATIÈRE SENSIBLE À LA LUMIÈRE

Publication
EP 2192976 A1 20100609 (EN)

Application
EP 08801834 A 20080904

Priority
• EP 2008007231 W 20080904
• EP 07017555 A 20070907
• EP 08801834 A 20080904

Abstract (en)
[origin: WO2009030477A1] There is provided a device for irradiating a light-sensitive material. The device comprises an activating chamber with an inner back surface part, an inner front surface part, and an inner side surface part connecting the inner back and front surface parts. A light-sensitive material is provided in the activating chamber, with the light-sensitive material being applied at least partly on the inner back surface part, and one or more light sources are arranged for irradiating the light-sensitive material in the activating chamber, said one or more light sources being adapted for emitting light with a wavelength within the range of radiation absorption of the light-sensitive material. The light-sensitive material may further be applied at least partly on the inner side surface part. The light-sensitive material may also be applied at least partly on the inner front surface part. According to an embodiment of the invention the activating chamber may have a gas inlet and a gas outlet, to thereby provide a device for producing a singlet oxygen or a singlet oxygen-activated oxygenous gas flow. According to another embodiment of the invention, the activating chamber may have a light output and a first end of a light guide being arranged at the light output, whereby activated light can be obtained from the other end of the light guide, to thereby provide a device for generating activated light. The one or more light sources may have sufficient intensity to achieve photo-sensitization with the light-sensitive material, and the one or more light sources may be formed by light emitting diodes. The light emitting diodes may be arranged so as to extend into the activating chamber.

IPC 8 full level
B01J 19/12 (2006.01); **C01B 13/02** (2006.01)

CPC (source: EP)
C01B 13/02 (2013.01); **C02F 1/30** (2013.01); **C02F 1/725** (2013.01); **C02F 2305/023** (2013.01); **C02F 2305/10** (2013.01)

Citation (search report)
See references of WO 2009030477A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA MK RS

DOCDB simple family (publication)
WO 2009030477 A1 20090312; EP 2192976 A1 20100609

DOCDB simple family (application)
EP 2008007231 W 20080904; EP 08801834 A 20080904