

Title (en)
LIGHTING MEANS AND METHOD FOR OPERATING SAME

Title (de)
LEUCHTMITTEL UND BETRIEBSVERFAHREN DAFÜR

Title (fr)
LUMINAIRE ET SON PROCÉDÉ DE FONCTIONNEMENT

Publication
EP 2659503 B1 20161221 (DE)

Application
EP 11822886 A 20111222

Priority
• DE 102010056028 A 20101227
• DE 102011008944 A 20110119
• DE 2011002167 W 20111222

Abstract (en)
[origin: WO2012095081A1] The invention relates to a lighting means having a gas volume and a coaxial HF-energy injection device for exciting same with surface waves. According to the invention, the coaxial HF-energy injection device (3) comprises a central conductor (4) guided through the gas volume (2).

IPC 8 full level
H01J 65/04 (2006.01)

CPC (source: EP RU US)
H01J 65/042 (2013.01 - RU US); **H01J 65/044** (2013.01 - EP US)

Citation (examination)
• WO 2004059694 A1 20040715 - ZAKRYTOE AKZIONERNOE OBSCHESTV [RU], et al
• DE 102009022755 A1 20101202 - FACHHOCHSCHULE AACHEN [DE]
• US 5063333 A 19911105 - LINDEN-SMITH NEIL A [GB], et al
• US 4049940 A 19770920 - MOISAN MICHEL, et al
• US 4792725 A 19881220 - LEVY DONALD J [US], et al
• KOUSAKA H ET AL: "Pressure dependence of surface wave-excited plasma column sustained along metal rod antenna", VACUUM, PERGAMON PRESS, GB, vol. 80, no. 11-12, 7 September 2006 (2006-09-07), pages 1154 - 1160, XP025009594, ISSN: 0042-207X, [retrieved on 20060907], DOI: 10.1016/J.VACUUM.2006.01.048
• BARDOS L ET AL: "MICROWAVE SURFATRON SYSTEM FOR PLASMA PROCESSING", JOURNAL OF VACUUM SCIENCE AND TECHNOLOGY: PART A, AVS /AIP, MELVILLE, NY., US, vol. 14, no. 2, 1 March 1996 (1996-03-01), pages 474 - 477, XP000620528, ISSN: 0734-2101, DOI: 10.1116/1.580109
• ZHANG X L ET AL: "A self-contained modelling and experimental study of surface wave produced argon discharges in a coaxial setup with a central metallic cylinder: II. Experiment", PLASMA SOURCES SCIENCE AND TECHNOLOGY, INSTITUTE OF PHYSICS PUBLISHING, BRISTOL, GB, vol. 6, no. 1, 1 February 1997 (1997-02-01), pages 101 - 110, XP020070212, ISSN: 0963-0252, DOI: 10.1088/0963-0252/6/1/015

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

DOCDB simple family (publication)
WO 2012095081 A1 20120719; CA 2822881 A1 20120719; EP 2659503 A1 20131106; EP 2659503 B1 20161221; EP 2659503 B9 20170621; RU 2013135113 A 20150210; RU 2604643 C2 20161210; US 2016172181 A1 20160616; US 9589784 B2 20170307

DOCDB simple family (application)
DE 2011002167 W 20111222; CA 2822881 A 20111222; EP 11822886 A 20111222; RU 2013135113 A 20111222; US 201113976208 A 20111222