

Title (en)

Illumination unit and electrodeless low-pressure discharge lamp suitable for use therein

Title (de)

Beleuchtungseinheit und elektrodenlose Niederdruck-Entladungslampe zur Anwendung in einer solchen Beleuchtungseinheit

Title (fr)

Ensemble d'illumination et lampe à décharge basse pression sans électrode apte à l'utilisation dans cet ensemble

Publication

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Application

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Abstract (en)

[origin: EP0594245A1] An illumination unit of the invention comprises an electrodeless low-pressure discharge-lamp (10) and a high-frequency power supply (50). The lamp (10) is provided with a gastight closed discharge vessel (20) with an ionisable fill (21). The lamp (10) further is provided with a coil (30) with turns (31,32) of a primary and a secondary winding (33,34). The power supply unit 50 is provided with input terminals (51a,51b) and is further provided with a first output terminal (52a), electrically neutral with respect to mass, that is connected to a first end (36a) of the primary winding (33) and with a further output terminal (52b) that is connected to a second end (36b) of the primary winding (33). During nominal operation of the lamp (10) the primary winding (33) excites a high-frequency magnetic field that maintains a electrical discharge in the discharge vessel (20) and that induces in the secondary winding (34) a potential drop in the direction of a first, with respect to the mass electrically neutral end (37a), to a second free end (37b) that varies in an opposite sense to the potential drop from the first to second end (36a, 36b) in the first winding (33). In a first end portion (39a) of the coil (30) that comprises half of the turns of the coil (30), the relative amount of turns (31) of the primary winding (33) is at least 3/2 times as large as the relative amount of turns (32) of the secondary winding (34). The measure of the invention improves the ignition speed of the lamp. <IMAGE>

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