

Title (en)
A PHOSPHOR COATING ARRANGEMENT FOR AN ELECTRODELESS DISCHARGE LAMP

Title (de)
PHOSPHORBESCHICHTUNGSEINRICHTUNG FÜR ELEKTRODENLOSE ENTLADUNGSLAMPE

Title (fr)
COUCHE DE PHOSPHORE POUR LAMPE A DECHARGE SANS ELECTRODE

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Application
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• GB 9500799 W 19950406

Abstract (en)
[origin: WO9527999A1] An electrodeless discharge lamp (10) having a lamp envelope (12) containing a fill of mercury and a rare gas is excitable to a discharge state by introduction of RF energy in close proximity thereto. A ballast circuit contained within the housing base portion (22) of the lamp is effective for generating the RF energy from conventional line power. The ballast circuit includes a core portion which extends within a re-entrant cavity (16) formed within the lamp envelope. During operation of the lamp, the re-entrant cavity portion is exposed to higher wall loading conditions than is the outer surface of the lamp envelope. These higher wall loading conditions require the use of comparatively more expensive rare earth phosphors (30) at the re-entrant cavity portion than are needed on the outer portion of the lamp envelope where it would be appropriate to utilize conventional halophosphate materials (32). In order to provide for two distinct phosphor coating materials in a single lamp envelope configuration and at a reasonable cost, such phosphor coating is done by coating the re-entrant cavity and the outer portion separately and then joining these components together to produce the finished lamp envelope. The juncture point between the re-entrant portion and the outer envelope portion resides under an upper rim portion of the housing and is therefore not visible in the end lamp product.

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H01J 61/42; H01J 65/04

IPC 8 full level
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