

Title (en)
AMALGAM SPHERES FOR ENERGY-SAVING LAMPS AND THE MANUFACTURE THEREOF

Title (de)
AMALGAMKUGELN FUER ENERGIESPARLAMPEN UND IHRE HERSTELLUNG

Title (fr)
BILLES D'AMALGAME POUR LAMPES À ÉCONOMIE D'ÉNERGIE ET LEUR PRODUCTION

Publication
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Application
EP 08736446 A 20080422

Priority
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• EP 08736446 A 20080422

Abstract (en)
[origin: EP1985717A1] The spheres are made from tin amalgam with a mercury content in the range 30-70%. They are coated with a metal- or alloy powder, which forms an amalgam with mercury. The powder particle diameter is less than 100 μ m. The powder is tin, zinc or an alloy of tin or zinc. The spheres are coated with 10 wt% of the powder, based on their weight. In addition they are coated with 0.001 - 1 wt% of powdered metal oxide. The powder is tin or a tin alloy. It is alternatively an alloy of tin, silver and copper. The diameter of the spheres is 50-2000 μ m. To make them, the amalgam is completely melted and dripped into coolant, e.g. a silicon oil, at a temperature below the setting temperature of the amalgam. The spheres are then separated-out. The coolant is a mineral-, organic- or synthetic oil. Residual oil is removed from the spheres by de-greasing. At room temperature, under constant circulation, the spheres are coated with the powder, until they no longer stick together. In a further stage, they are similarly-coated with the metal oxide powder. An independent claim is included for the method of manufacturing the amalgam spheres.

IPC 8 full level
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Cited by
EP2497841A1; EP2975143A1; WO2012119977A1; US9324555B2; US9263245B2; US9659762B2; DE202011110608U1

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