

Title (en)
METHOD AND APPARATUS FOR PRODUCING MATERIAL VAPOUR

Title (de)
VERFAHREN UND VORRICHTUNG ZUR ERZEUGUNG VON MATERIALDAMPF

Title (fr)
PROCEDE ET APPAREIL DE PRODUCTION DE VAPEURS DE MATERIAUX

Publication
EP 1109641 A1 20010627 (EN)

Application
EP 99932548 A 19990721

Priority
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Abstract (en)
[origin: WO0005017A1] An apparatus for producing material vapour for the production of powders or films comprises first (3) and second (4) electrodes mountable in a reaction vessel (2), and arranged to have a voltage applied to them to form an arc between them, the first electrode (3) being arranged to form at a part of the first electrode (9) a molten droplet or film (10) of a precursor material, when a precursor material (8) is moved towards the part, and wherein continued heating of the molten droplet or film causes vapourisation of material from the molten droplet or film to produce material vapour. The surface to volume ratio of the droplet or film (10) is selected in a manner such as to limit heat loss during an evaporation of material from the droplet or film, the heat loss being the portion of heat input into the surface of the droplet or film not used to evaporate material from the droplet or film.

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