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(54) Title: ARC SOURCE WITH CONFINED MAGNETIC FIELD

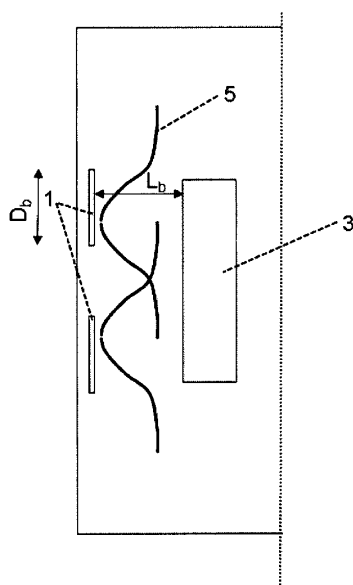


Figure 1

(57) Abstract: An ARC evaporator comprising: - a cathode assembly comprising a cooling plate (11), a target (1) as cathode element, - an electrode arranged for enabling that an arc between the electrode and the front surface (1A) of the target (1) can be established - a magnetic guidance system placed in front of the back surface (1B) of the target (i) comprising means for generating one or more magnetic fields whereas: - the borders of the cathode assembly comprise a surrounding shield (15) made of ferromagnetic material, wherein the surrounding shield (15) has a total height (H) in the transversal direction, said total height (H) including a component (C) for causing a shielding effect of magnetic field lines extending in any longitudinal directions, establishing in this manner the borders of the cathode assembly as limit of the extension of the magnetic field lines in any longitudinal direction.

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