

Title (en)

GLOW DISCHARGE SOURCE FOR ELEMENTAL ANALYSIS

Title (de)

GLIMMENTLADUNGSQUELLE FÜR DIE ELEMENTARANALYTIK

Title (fr)

SOURCE DE DECHARGE LUMINESCENTE POUR L'ANALYSE ELEMENTAIRE

Publication

EP 1290716 A2 20030312 (DE)

Application

EP 01940154 A 20010412

Priority

- DE 0101481 W 20010412
- DE 10019257 A 20000415

Abstract (en)

[origin: WO0180282A2] The invention relates to a glow discharge source for elemental analysis on solid material samples, which can be operated with a direct voltage, a pulsed direct voltage, or a HF voltage. The aim of the invention is to produce a glow discharge source for elemental analysis on solid material samples, whereby a glow discharge is generated between the material sample (4) and an anode (1), by means of a connected electrical voltage source (6), such that the blind current is minimised and the current flowing through the cooling water is not included in the measurement. Said aim is achieved, whereby a current transformer element (9), for recording the current flowing between the glow discharge (7) and the voltage source (6) is arranged in or on the anode (1), or the components electrically connected to the anode. The glow discharge source may be used for optical glow discharge spectroscopy (GD-OES), glow discharge mass spectroscopy (GD-MS), or secondary neutral mass spectroscopy (SNMS).

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US 4853539 A 19890801 - HALL DAVID J [GB], et al

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