

Title (en)
LASER ABLATION CELL

Title (de)
LASERABLATIONSZELLE

Title (fr)
CELLULE D'ABLATION LASER

Publication
EP 3240014 A1 20171101 (EN)

Application
EP 16167657 A 20160429

Priority
EP 16167657 A 20160429

Abstract (en)

An ablation cell for laser ablation of a sample material comprises a sample chamber (21) for housing a sample. A carrier gas (G1) is fed to the sample chamber. A laser beam (41) impinges on a sample (23) in the sample chamber. The carrier gas together with ablated aerosol is removed from the sample chamber (21) through an outlet channel (12). In order to reduce dispersion of the ablated aerosol, a make-up gas (G2) is fed to the outlet channel through at least one make-up gas channel. The make-up gas channel merges with the outlet channel at a channel junction (17). The make-up gas channel either concentrically surrounds the outlet channel at the channel junction (17), or at least two make-up gas channels (14, 15) are provided, the make-up gas channels merging symmetrically into the outlet channel.

IPC 8 full level
H01J 49/04 (2006.01)

CPC (source: EP)
H01J 49/0463 (2013.01)

Citation (applicant)

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- D. ASOGAN ET AL.: "An open, non-contact cell for laser ablation-inductively coupled plasma-mass spectrometry", J. ANAL. AT. SPECTROM., vol. 24, 2009, pages 917 - 923
- L. HALICZ; D. GIINTHER: "Quantitative analysis of silicates using LA-ICP-MS with liquid calibration", J. ANAL. AT. SPECTROM., vol. 19, 2004, pages 1539 - 1545, XP008142376, DOI: doi:10.1039/B410132D

Citation (search report)

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- [Y] EP 0452930 A2 19911023 - HITACHI LTD [JP]
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Designated contracting state (EPC)

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