

Title (en)

INTEGRATED DEVICE FOR INSTANT DETECTION AND IDENTIFICATION OF AN ENTITY.

Title (de)

INTEGRIERTES GERÄT ZUR MOMENTANEN ERFASSUNG UND ERKENNUNG EINER ENTITÄT.

Title (fr)

DISPOSITIF INTEGRE POUR LA DETECTION ET L'IDENTIFICATION INSTANTANEEES D'UNE ENTITE.

Publication

**EP 0647316 A1 19950412 (FR)**

Application

**EP 94914451 A 19940427**

Priority

- FR 9400478 W 19940427
- FR 9305204 A 19930427

Abstract (en)

[origin: WO9425837A1] This integrated device for instantly identifying, qualitatively and quantitatively, a physico-chemical entity or a plurality of such entities contained in or on a sample, and liable to return one or more emission or absorption or reflectance spectra when excited by an electromagnetic wave, comprises, within a shielded housing (1): a polychromator (5) to which the emission, absorption or reflectance spectrum or spectra from the analysed sample are directed; a detection unit (6) for said signals, positioned on the optical path of the signals emitted by the polychromator (5); a conversion circuit (6) coupled to said polychromator (5), a central processing unit (7) integrating, in an associated memory, a plurality of standard spectra representative of known and predetermined entities, for analysing the digital spectrum or spectra thus obtained, for comparing, following a decorrelation process, the spectrum or spectra with the spectra stored in said memory, and for deducting, from this comparison, the nature and concentration of the predetermined physico-chemical entity or entities in or on the sample.

IPC 1-7

**G01J 3/28**; G01N 21/31; G01J 3/50

IPC 8 full level

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CPC (source: EP US)

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