

Title (en)

SIMULTANEOUS MULTI-BEAM PLANAR ARRAY IR (PAIR) SEPCTROSCOPY

Title (de)

PLANARES ARRAY MIT GLEICHZEITIGEN MEHRFACHSTRÄHLEN FÜR DIE IR-(PAAR)SPEKTROSKOPIE

Title (fr)

SPECTROSCOPIE INFRAROUGE DE MATRICE PLANE (PAIR) SIMULTANEE, A PLUSIEURS FAISCEAUX

Publication

EP 1432967 A4 20041222 (EN)

Application

EP 02728506 A 20020319

Priority

- US 0130724 W 20011001
- US 98413701 A 20011029
- US 0208346 W 20020319

Abstract (en)

[origin: WO03031923A1] An apparatus (300') and method capable of providing spatially multiplexed IR spectral information simultaneously in real-time for multiple samples or multiple spatial areas of one sample using IR absorption phenomena requires no moving parts or Fourier Transform during operation, and self-compensates for background spectra and degradation of component performance over time. IR spectral information and chemical analysis of the samples is determined by using one or more IR sources (310, 311), one or more sampling accessories (330, 331) for positioning the sample volumes, one or more optically dispersive elements (350), a focal plane array (FPA) (370) arranged to detect the dispersed light beams, and a processor (380) and display (390) to control the FPA (370), and display(390) to control the FPA (370) and display IR spectrograph.

IPC 1-7

G01J 3/28; G01N 21/25

IPC 8 full level

G01J 3/02 (2006.01); **G01J 3/14** (2006.01); **G01J 3/28** (2006.01); **G01J 3/42** (2006.01); **G01N 21/25** (2006.01); **G01N 21/35** (2014.01);
G01N 21/3563 (2014.01); **G01N 21/41** (2006.01)

CPC (source: EP KR)

G01J 3/02 (2013.01 - EP); **G01J 3/0216** (2013.01 - EP); **G01J 3/0218** (2013.01 - EP); **G01J 3/0224** (2013.01 - EP); **G01J 3/0294** (2013.01 - EP);
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G01N 21/35 (2013.01 - EP); **G01N 21/3563** (2013.01 - EP); **G01N 21/3577** (2013.01 - EP)

Citation (search report)

- [A] US 5002392 A 19910326 - SWOPE C HERMAS [US], et al
- [A] WO 0169211 A1 20010920 - SPECTRUMEDIX CORP [US], et al
- [A] DE 2938844 A1 19810423 - PHILIPS PATENTVERWALTUNG [DE]
- [PA] US 2001028036 A1 20011011 - THUNDAT THOMAS G [US], et al

Citation (examination)

- US 6204919 B1 20010320 - BARSHAD YOAV [NL], et al
- See also references of WO 03031923A1

Cited by

JP2019537014A

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DOCDB simple family (publication)

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KR 20040037219 A 20040504; KR 20060028657 A 20060330

DOCDB simple family (application)

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