

Search query (3): fn=(49866752 or 49866752 or 49866752 or 57668159 or 57668159 or 57874017 or 57874017 or 60579357 or 65907671 or 59457167 or 28317593 or 33151475 or 29907375 or 33151475 or 34195869 or 42117229 or 42117283 or 42117229 or 43126173 or 43160050 or 43126173 or 49886858 or 50015732 or 28317593 or 33151475 or 29907375 or 33151475 or 43160050 or 43126173 or 43126173 or 42117283 or 42117229 or 49886858 or 50015732 or 49866752 or 10664413 or 30385186 or 11169821 or 11044459 or 11485865)

Results: 21

1) Family number: 10664413 (US5719672A)

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Title: Echelle spectrometer with a shaped oriented slit

Abstract: An improved echelle spectrometer comprises a slit in light blocking plate, an echelle grating, and a detector array. The slit is shaped and oriented to align an image of a light beam projected through the slit, onto the echelle grating and onto the detector in a desired orientation and shape relative to the detector array. Precise adjustment of the shape and orientation of the slit is dependent on the orientation of the detector with respect to the dispersion direction of the echelle grating. The echelle spectrometer provides high detector resolution with reduced read-out time.

Classifications:

International (IPC 8-9): G01J3/00 G01J3/04 G01J3/18 G02B5/18 G21K1/06 (Advanced/Invention);

G02B5/18 (Advanced/Non-invention);

G01J3/12 G02B5/18 G21K1/00 (Core/Invention)

International (IPC 1-7): G01J3/00 G01J3/04 G01J3/18 G01J3/28 G02B5/18 G21K1/06

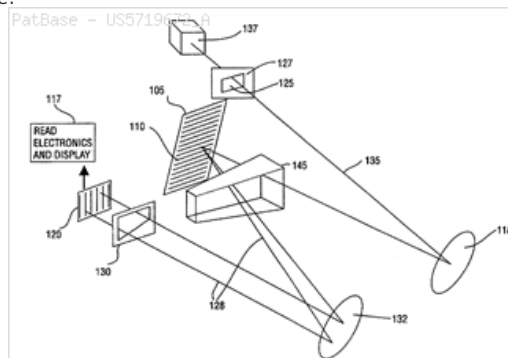
CPC: G01J3/1809 G01J3/189

European: G01J3/18C G01J3/18P

US: 356/328

JP F-Term: 2G082 2H049 2H049/AA50 2H049/AA51 2H049/AA58 2H049/AA63 2H049/AA64 2H249 2H249/AA50 2H249/AA51 2H249/AA58 2H249/AA63 2H249/AA64

JP F-Index: G02B5/18 G21K1/06/S



Family:

Publication number	Publication date	Application number	Application date
AU199736740 A1	19980402	AU19970036740	19970902
AU719833 B2	20000518	AU19970036740	19970902
CA2216786 AA	19980326	CA19972216786	19970925
CA2216786 C	20000704	CA19972216786	19970925
DE69722551 D1	20030710	DE19976022551	19970922
DE69722551 T2	20040422	DE19976022551T	19970922
EP0833135 A1	19980401	EP19970307356	19970922
EP0833135 B1	20030604	EP19970307356	19970922
JP10123295 A2	19980515	JP19970276669	19970925
JP4044989 B2	20080206	JP19970276669	19970925
US5719672 A	19980217	US19960721148	19960926

Priority:

US19960721148 19960926 CA19972216786 19970925

Probable Assignee: AGILENT TECHNOLOGIES INC

Assignee(s): (std): VARIAN ASSOCIATES ; VARIAN INC

Assignee(s): VARIAN ASSOCIATES INC ; AGILENT TECHNOLOGIES INC ; CHIEN RING LING ; VARIAN ASSOC INC

Inventor(s): (std): CHIEN RING LING

Inventor(s): RING LING CHIEN

Agent(s): PHILLIPS ORMONDE FITZPATRICK; R WILLIAM WRAY AND ASSOCIATES

Designated states: CH DE GB LI

2) Family number: 11044459 (US5831729A)

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Title: Spectrometer

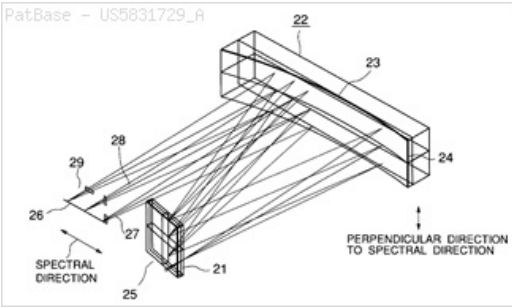
Abstract: It is the objective of the present invention to provide a spectrometer of which the modulation transfer function (MTFs) in a spectral direction and in a direction perpendicular to the spectral direction is enhanced for all wavelengths ranging from the short to the long. For a spectrometer according to the present invention, a spherical face is employed for collimating and condensing light in a spectral direction, instead of the spherical collimator/condenser that is used for a conventional spectrometer, and toroidal faces in a non-spherical shape, such as in a paraboloidal shape, are provided for collimating and condensing in a direction perpendicular to the spectral direction. The focusing distance on the non-spherical face is a distance so calculated that the modulation transfer function is improved for all the wavelengths ranging from the short to the long. In addition, a detector is inclined at such an angle that the modulation transfer function is improved for all the wavelengths ranging from the short to the long.

Classifications:

International (IPC 8-9): G01J3/02 G01J3/18 (Advanced/Invention);

G01J3/00 G01J3/12 (Core/Invention)

International (IPC 1-7): G01J3/18
CPC: G01J3/18 G01J3/02 G01J3/0208
European: G01J3/02 G01J3/18 S01J3/02B1
US: 356/305 356/328
JP F-Term: 2G020 2G020/CA11 2G020/CC04 2G020/CC42 2G020/CC63 2G020/CD04 2G020/CD22
JP F-Index: G01J3/18



Family:

Publication number	Publication date	Application number	Application date
JP10227693 A2	19980825	JP19970029887	19970214
JP3137020 B2	20010219	JP19970029887	19970214
US5831729 A	19981103	US19980021320	19980210

Priority:

JP19970029887 19970214

Probable Assignee: NEC CORP
Assignee(s): (std): NEC CORP
Inventor(s): (std): KUZU AKIHIKO

3) Family number: 11169821 (US5815261A)

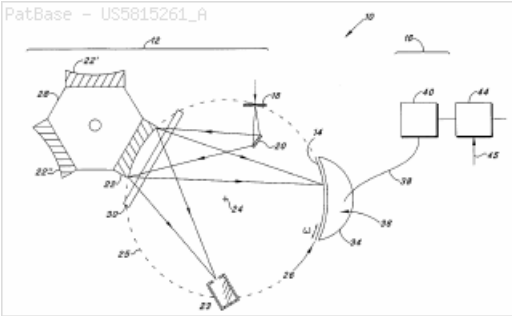
© PatBase

Title: Correlation spectrometer with high-resolution, broad-band optical characteristics

Abstract: A spectrometer that determines a spectral correlation between an optical signal and a reference spectra over a broad spectral range while maintaining a relatively high resolution. The spectrometer uses a mask that has high resolution slits at wavelengths corresponding to the reference spectra. Relative oscillatory movement is induced between the mask and the imaged spectra of the optical signal is induced and the light passing through the slits is collected by an optical sensor. A lock-in amplifier monitors a signal from the optical sensor as well as a signal representative of the oscillatory movement and determines a correlation between them.

Classifications:

International (IPC 8-9): G01J3/20 G01J3/457 (Advanced/Invention);
G01J3/28 (Advanced/Non-invention)
International (IPC 1-7): G01J3/04 G01J3/20
CPC: G01J3/20 G01J3/0229 G01J3/0235 G01J3/457 G01J2003/2866
European: G01J3/20 G01J3/457 S01J3/02B10 S01J3/02B8 S01J3/28M
US: 356/310 356/328



Family:

Publication number	Publication date	Application number	Application date
US5815261 A	19980929	US19970838298	19970416

Priority:

US19970838298 19970416

Probable Assignee: GENERAL ATOMICS
Assignee(s): (std): GEN ATOMICS
Assignee(s): GENERAL ATOMICS
Inventor(s): (std): BROOKS NEIL H ; JENSEN TORKIL H ; NAUMENKO NICOLAE N ; TUGARINOV SERGEY N

4) Family number: 11485865 (US5880834A)

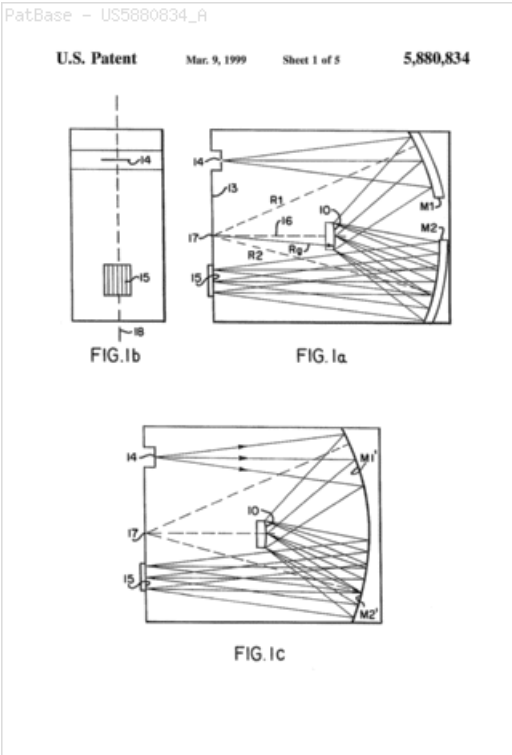
© PatBase

Title: Convex diffraction grating imaging spectrometer

Abstract: A 1:1 Offner mirror system for imaging off-axis objects is modified by replacing a concave spherical primary mirror that is concentric with a convex secondary mirror with two concave spherical mirrors M1 and M2 of the same or different radii positioned with their respective distances d1 and d2 from a concentric convex spherical diffraction grating having its grooves parallel to the entrance slit of the spectrometer which replaces the convex secondary mirror. By adjusting their distances d1 and d2 and their respective angles of reflection alpha and beta, defined as the respective angles between their incident and reflected rays, all aberrations are corrected without the need to increase the spectrometer size for a given entrance slit size to reduce astigmatism, thus allowing the imaging spectrometer volume to be less for a given application than would be possible with conventional imaging spectrometers and still give excellent spatial and spectral imaging of the slit image spectra over the focal plane.

Classifications:

International (IPC 8-9): G01J3/02 G01J3/18 G01J3/20 G01J3/28 G03F7/20 (Advanced/Invention);
G01J3/00 G01J3/12 G01J3/28 G03F7/20 (Core/Invention)
International (IPC 1-7): G01J3/18
CPC: G01J3/02 G01J3/0294 G01J3/18 G01J3/20 G01J3/2803 G01J3/2823 G03F7/70233 G01J3/0208 G01J3/021 G01J3/0256
European: G01J3/02 G01J3/02B1 G01J3/02B2 G01J3/02C G01J3/02T G01J3/18 G01J3/20 G01J3/28B G01J3/28D G03F7/20T16 G03F7/70F4
US: 356/305 356/328



Family:

Publication number	Publication date	Application number	Application date
US5880834 A	19990309	US19980047083	19980324

Priority:

US19960733751 19961016 US19980047083 19980324

Probable Assignee: NASA

Assignee(s): (std): NASA

Assignee(s): THE UNITED STATES OF AMERICA AS REPRESENTED BY THE ; THE UNITED STATES OF AMERICA AS REPRESENTED BY THE ADMINISTRATOR OF THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION ; ADMINISTRATOR OF NATIONAL AERONAUTICS AND SPACE AD

Inventor(s): (std): CHRISP MICHAEL P

5) Family number: 28317593 (US2002180977A)

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Title: APPARATUS AND METHOD FOR MEASURING INTENSITY AND PHASE OF A LIGHT PULSE WITH AN INTERFEROMETRIC ASYMMETRIC SINGLE-SHOT AUTOCORRELATOR

Abstract: An apparatus and method to measure optical intensity and phase of one or several light pulses is described. The apparatus combines a spectrally resolved interferometric asymmetric single-shot optical autocorrelator and imaging spectrograph. The asymmetric design of the optical autocorrelator based on second harmonic generation eliminates time-direction ambiguity, while a spectrally resolved interferometric pattern allows the performance of self-check and self-calibration of the apparatus and substantially improves convergence, robustness and reliability of the computational retrieval algorithm.

Classifications:

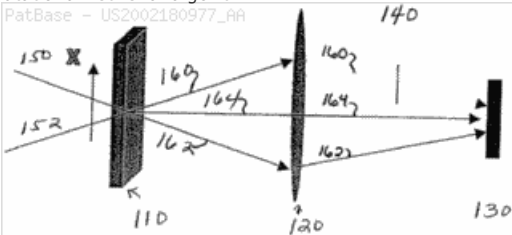
International (IPC 8-9): G01B9/02 G01J9/02 (Advanced/Invention);
G06F (Subclass/Invention)

International (IPC 1-7): G01B9/02 G06F

CPC: G01J9/02

European: G01J9/02

US: 356/450 356/456 356/484



Family:

Publication number	Publication date	Application number	Application date
AU2002340711 AA	20021118	AU20020340711	20020430
US2002180977 AA	20021205	US20020136655	20020430
US6801318 BB	20041005	US20020136655	20020430
WO02091116 A2	20021114	WO2002US14072	20020430
WO02091116 A3	20030724	WO2002US14072	20020430

Priority:

US20010288922P 20010504 US20020136655 20020430 WO2002US14072 20020430

Probable Assignee: CONTINUUM ELECTRO OPTICS INC

Assignee(s): (std): EXCEL QUANTRONIX INC ; FU QIANG ; NIKITIN SERGEI PETROVICH ; MASALOV ANATOLY VICTOROVICH ; EXCEL QUANTRONIX CORP ; QUANTRONIX CORP

Assignee(s): SYNRAD INC ; BANK OF AMERICA NA ; BANK OF NEW YORK MELLON TRUST CO ; BANK OF NEW YORK MELLON TRUST CO NA COLLATERAL AGENT AS ; CAMBRIDGE TECHNOLOGY INC ; CONTINUUM ELECTRO OPTICS INC ; CONTROL LASER (D B A BAUBLYS CONTROL LASER) CORP ; EXCEL TECHNOLOGY INC ; GSI GROUP CORP ; GSI GROUP INC ; MES INT INC ; MICROE SYSTEMS CORP ; OPTICAL CORP ; PHOTO RESEARCH INC ; CONTROL LASER D B A BAUBLYS CONTROL LASER CORP

Inventor(s): (std): MASALOV ANATOLY VIKTOROVICH ; MASALOV ANATOLY VICTOROVICH ; NIKITIN SERGEI PETROVICH ; FU QIANG

Inventor(s): SERGEI PETROVICH NIKITIN ; QIANG FU ; ANATOLY VICTOROVICH MASALOV

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ OM PH PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW

6) Family number: 29907375 (US2003231308A)

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Title: REFRACTIVE-DIFFRACTIVE SPECTROMETER

Abstract: A diffraction grating and a prism with the appropriate characteristics are employed to provide a combined dispersive characteristic that is substantially linear over the visible spectrum. Radiation from the grating and prism is collimated by a lens towards a detector array. The grating or a telecentric stop between the grating and prism is placed at a focal point of the lens in a telecentric arrangement so that equal magnification is achieved at the detector array. If the detector array is replaced by a plurality of optical channels, a multiplexer/demultiplexer is obtained.

Classifications:

International (IPC 8-9): G01J3/12 G01J3/28

G02B6/34 (Advanced/Invention)

International (IPC 1-7): G01J3/18 G01J3/28

CPC: G01J3/12 G01J3/2803 G01J3/2823 G01J3/513 G02B6/29311

G02B6/29373 G01J3/465 G01J3/0205 G01J3/0208 G01J3/0229

G01J3/0256 G01J3/0262 G01J3/28 G01J2003/123 G01J3/027 G01J3/0272

European: G01J3/12 G01J3/28 G01J3/28B G01J3/28D G02B6/293D2T

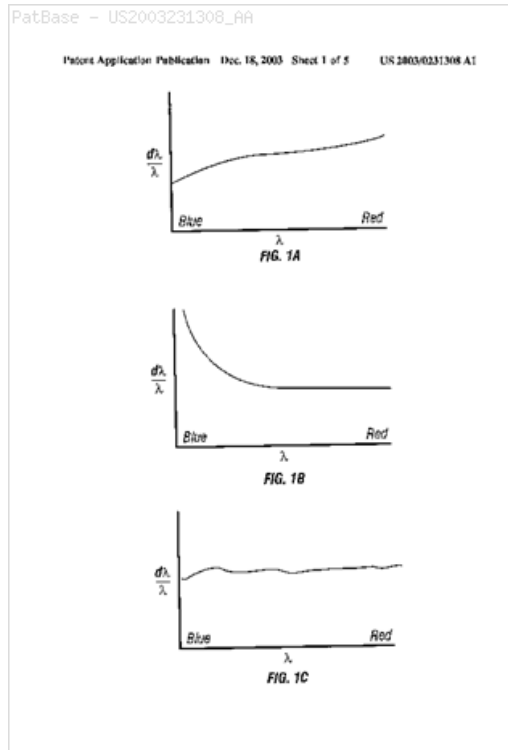
G02B6/293M2 S01J3/02B S01J3/02B1 S01J3/02B8 S01J3/02C S01J3/02D

S01J3/02G S01J3/02H S01J3/12F2 S01J3/46E S01J3/51A S02B6/293D2T

S02B6/293M2

US: 356/326 356/326P 356/326S 356/328 356/328P 356/328S 356/331

356/334



Family:

Publication number	Publication date	Application number	Application date
AU2002352790 AA	20030610	AU20020352790	20021119
US2003231308 AA	20031218	US20010991038	20011121
US2004227939 AA	20041118	US20030723342	20031125
US2005219525 AA	20051006	US20050083895	20050317
US2006170920 AA	20060803	US20060363574	20060227
US6661513 BA	20031209	US20010991038	20011121
US7106440 BB	20060912	US20050083895	20050317
US7408638 BB	20080805	US20060363574	20060227
WO03046495 A1	20030605	WO2002US37057	20021119

Priority:

US20010991038 20011121 WO2002US37057 20021119 US20030723342 20031125
US20050083895 20050317 US20060363574 20060227

Probable Assignee: ROYBIV LCC D B A DELTA E

Assignee(s): (std): DELTA E ; GRANGER EDWARD M ; ROYGBIV LLC ; ROYGBIV LLC D B A DELTA E

Assignee(s): KYOCERA CORP ; ROYBIV LCC D B A DELTA E

Inventor(s): (std): EDWARD M GRANGER ; GRANGER EDWARD M

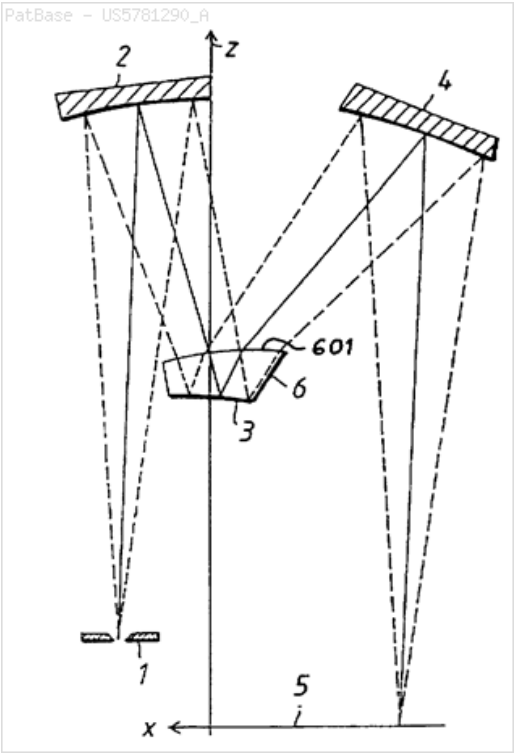
Inventor(s): GRANGER EDWARD
Agent(s): PARSONS HSUE AND DE RUNTZ LLP; DAVIS WRIGHT TREMAINE LLP
Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ OM PH PL PT RO RU SC SD SE SG SI SK SL SN SZ TD TG TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA ZM ZW

7) Family number: 30385186 (US5781290A) © PatBase

Title: Spectral apparatus of the concentric type having a fery prism

Abstract: The conventional grating is substituted by one or more curved prisms in a concentric spectrometer of the type derived from the Offner mirror objective. The curved prisms are known as F+E,acu e+EE ry prisms. The deviations from the concentric form are used as a corrective device. The spectral apparatus is especially suited as an imaging spectrometer having a detector array because the two-dimensional image can be formed in the direction of the spatial coordinate as well as the spectral coordinate without distortions and curvatures.

Classifications:
International (IPC 8-9): G01J3/14 (Advanced/Invention); G01J3/12 (Core/Invention)
International (IPC 1-7): G01J3/14 G01J3/28
CPC: G01J3/14
European: G01J3/14
US: 356/326
JP F-Term: 2G020 2G020/CC13
JP F-Index: G01J3/14



Family:

Publication number	Publication date	Application number	Application date
DE19537949 A1	19970417	DE19951037949	19951012
EP0768517 A2	19970416	EP19960115923	19961004
EP0768517 A3	19980715	EP19960115923	19961004
JP9178557 A2	19970711	JP19960287254	19961011
US5781290 A	19980714	US19960730710	19961015

Priority:

DE19951037949 19951012

Probable Assignee: CARL ZEISS AG

Assignee(s): (std): AEROSPATIALE ; AEROSPATIALE S N I ; ZEISS CARL FA ; ZEISS STIFTUNG ; ZEISS CARL

Assignee(s): FA CARL ZEISS ; AEROSPATIALE SOCIETE NATIONALE INDUSTRIELLE PARIS FR ; CARL ZEISS AG ; AEROSPAT SOC NATL IND ; CARL ZEISS SMT AG ; CARL ZEISS STIFTUNG HEIDENHEIM BRENZ CARL ZEISS ; CARL ZEISS STIFTUNG HEIDENHEIM BRENZ CARL ZEISS734 ; CARL ZEISS STIFTUNG ; CARL ZEISS STIFTUNG HEIDENHEIM BRENZ ; CARL ZEISS FA ; FA CARL ZEISS 89518 HEIDENHEIM DE ; CARL ZEISS ; CARL ZEISS STIFTUNG HANDELND ALS CARL ZEISS ; AEROSPATIALE SOC NAT INDUSTRIELLE ; AEROSPATIALE SOC NAT INDUSTRIELLE CENTRE OPERATION ; AEROSPATIALE SOC NATIONALE IND ; AEROSPATIALE SOCIETE NATIONALE INDUSTRIELLE ; AEROSPATIALE SOCIETE NATIONALE INDUSTRIELLE ; AEROSPATIALE SOCIETE NATIONALE INDUSTRIELLE PARIS

Inventor(s): (std): BITTNER REINHOLD ; DELCLAUD YVES ; CERUTTI MAORI GUY ; LABANDIBAR JEAN YVES ; JIYANNIBU RABANDEIBAA ; IBU DERUKURAUDO ; GIYUI SERUTEIIMAORI ; RAINHORUTO BITONAA

Inventor(s): BITTNER REINHOLD 73529 SCHWAEBISCH GMUEND DE ; LABANDIBAR JEAN YVES CANNES LA BOCCA FR ; CERUTTI MAORI GUY CANNES LA BOCCA FR ; DELCLAUD YVES CANNES LA BOCCA FR

Designated states: CH DE FR GB IT LI NL

Title: CROSS-DISPERSED SPECTROMETER IN A SPECTRAL DOMAIN OPTICAL COHERENCE TOMOGRAPHY SYSTEM

Abstract: A spectral-domain optical coherence tomography system using a cross-dispersed spectrometer is disclosed. The interfered optical signal is dispersed by a grating into several orders of diffraction, and these orders of diffraction are separated by an additional dispersive optical element. The spectral interferogram is recorded by a set of linear detector arrays, or by a two-dimensional detector array.

Classifications:**International (IPC 8-9):** G01B9/02 G01J3/18 G01J3/28 G01N21/17

G01N21/47 (Advanced/Invention);

G01B9/02 G01J3/12 G01J3/28 G01N21/17 G01N21/47 (Core/Invention)

CPC: G01J3/14 G01J3/1809 G01J3/2803 A61B3/102 G01B9/02044

G01B9/02091 G01N21/4795 G01J3/02 G01J3/0205 G01J3/0208

G01J3/0216 G01J3/0224 G01J3/0256 G01J3/0286 G01J3/18 G01J3/22

G02B5/1814 G02B27/4244

European: G01J3/02 G01J3/02B G01J3/02B1 G01J3/02B4 G01J3/02B6

G01J3/02C G01J3/02N G01J3/14 G01J3/18 G01J3/18C G01J3/22

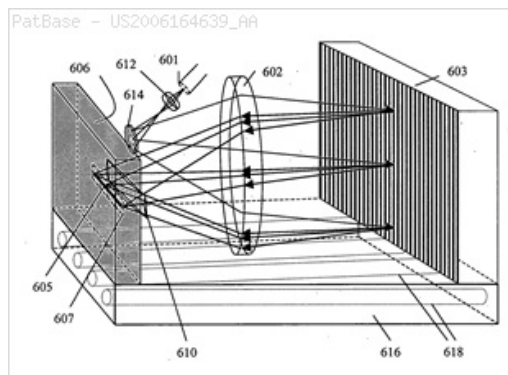
G01J3/28B G01N21/47S G02B27/42B3 G02B5/18E

US: 356/326 356/326P 356/328 356/328P**JP F-Term:** 2G059 2G059/AA05 2G059/EE02 2G059/EE12 2G059/HH01

2G059/HH06 2G059/JJ05 2G059/JJ06 2G059/JJ11 2G059/JJ13 2G059/JJ14

2G059/JJ17 2G059/JJ19 2G059/JJ20 2G059/JJ22 2G059/KK04

2G059/MM01 2G059/MM10 2G059/NN02

JP F-Index: G01N21/17/625**Family:**

Publication number	Publication date	Application number	Application date
EP1839034 A1	20071003	EP20060706293	20060119
JP2008528953 T2	20080731	JP20070551610T	20060119
JP5274843 B2	20130828	JP20070551610T	20060119
US2006164639 AA	20060727	US20060333134	20060117
US2007030483 AA	20070208	US20050196043	20050803
US7342659 BB	20080311	US20060333134	20060117
US7456957 BB	20081125	US20050196043	20050803
WO6077106 A1	20060727	WO2006EP00435	20060119
WO7014708 A2	20070208	WO2006EP07480	20060728
WO7014708 A3	20070531	WO2006EP07480	20060728

Priority:

US20050645662P 20050121

US20050196043 20050803

US20060333134 20060117

WO2006EP00435 20060119

Probable Assignee: CARL ZEISS AG**Assignee(s):** (std): EVERETT MATTHEW J ; FOLEY JAMES P ; HORN JOCHEN M ; HORN JOCHEN M M ; O HARA KEITH E ; ZEISS CARL MEDITEC AG ; O HARA KEITH ; ZHOU YAN ; ZEISS CARL MEDITEC INC**Assignee(s):** CARL ZEISS AG ; CARL ZEISS MEDITEC AG ; CARL ZEISS MEDITEC INC ; HORN JOCHEN MM**Inventor(s):** (std): O HARA KEITH ; ZHOU YAN ; FOLEY JAMES P ; EVERETT MATTHEW J ; HORN JOCHEN M ; O HARA KEITH E ; HORN JOCHEN M M**Inventor(s):** HORN JOCHEN MM ; FOLEY JAMES ; HORN JOCHEN ; EVERETT MATTHEW**Agent(s):** STALLMAN AND POLLOCK LLP**Designated states:** AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW**Title:** SPECTROGRAPH WITH SEGMENTED DISPERSION DEVICE

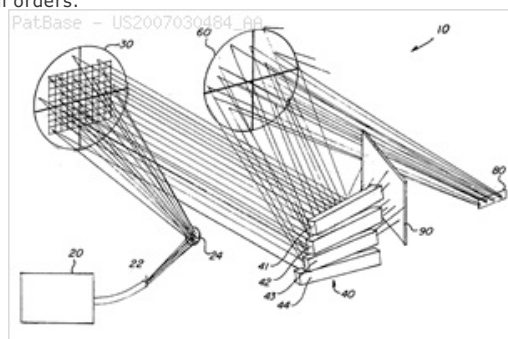
Abstract: A spectrograph is disclosed generally comprising a radiation source and a dispersion device that includes a plurality of segments arranged adjacently along a plane upon which the radiation is incident, where each of the segments disperses the radiation differently than adjacent segments. In certain embodiments, each segment can be rotated and titled separately from the other segments. In some embodiments, the dispersed radiation is received by a detector in a plurality of spectral channels corresponding to the segments and including radiation of different spectral orders.

Classifications:**International (IPC 8-9):** G01J3/28 (Advanced/Invention);

G01J3/28 (Core/Invention)

CPC: G01J3/18 G01J3/02 G01J3/0202 G01J3/0237 G01J3/06 G01J3/36**European:** G01J3/02 G01J3/02A G01J3/02B11 G01J3/06 G01J3/18

G01J3/36

US: 356/328 356/328P

Family:

Publication number	Publication date	Application number	Application date
US2007030484 AA	20070208	US20060500825	20060808

Priority:

US20050706354P 20050808 US20060500825 20060808

Probable Assignee: ACTON RESEARCH CORP

Assignee(s): (std): ACTON RES CORP

Assignee(s): ACTON RESEARCH CORP

Inventor(s): (std): SOBCZYNSKI RADOSLAW

Agent(s): ST ONGE STEWARD JOHNSTON AND REENS LLC

10) Family number: 42117229 (US2008212074A)

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Title: HAND-HELD, SELF-CONTAINED OPTICAL EMISSION SPECTROSCOPY (OES) ANALYZER

Abstract: A hand-held, self-contained, battery-powered test instrument for analyzing composition of a sample includes an exciter for exciting at least a portion of the sample, a compact cross-dispersed spectrometer for receiving an optical signal from the excited portion of the sample and a processor for processing spectral data about the optical signal from the spectrometer. The exciter may include a spark generator and a counter electrode, a laser or other device for generating the optical signal from the sample portion. The spectrometer has a wavelength range broad enough to enable the test instrument to detect and determine relative quantities of carbon, phosphorous, sulfur, manganese, silicon, iron and other elements necessary to identify common alloys. The spectrometer includes a structural member made of a light-weight material having a small coefficient of thermal expansion (CTE). The spectrometer is dimensionally stable over a range of expected ambient temperatures, without controlling the temperature of the spectrometer.

Classifications:

International (IPC 8-9): G01J3/00 G01J3/28 G01J3/30 G01J3/443
G01N21/00 G01N21/63 G01N21/67 G01N21/71

G02B7/02 (Advanced/Invention);

G01J3/00 G01J3/28 G01J3/443 G01N21/00 G01N21/62 G01N21/63
G01N21/71 G02B7/02 (Core/Invention)

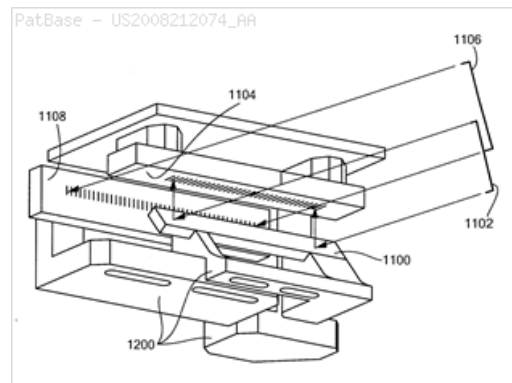
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G01N21/67 G01N21/718 G01N2201/0221 G01J3/0291 G01J3/0297
G01J3/0202 G01J3/0256 G01J3/0264 G01J3/0272 G01J3/0283
G01J3/0286

European: G01J3/02 G01J3/02A G01J3/02C G01J3/02E G01J3/02H
G01J3/02M G01J3/02N G01J3/02R G01J3/02U G01J3/12 G01J3/28B
G01J3/36 G01J3/443 G01N21/33 G01N21/67 G01N21/71F S01N201/022B

US: 356/311 356/311S 356/313 356/318 356/326 356/326P 356/51
356/51P 356/73 356/73S 359/819 359/819S

JP F-Term: 2G043 2G043/AA01 2G043/AA03 2G043/AA06 2G043/BA02
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2G043/GA28 2G043/GB16 2G043/HA01 2G043/HA02 2G043/JA04
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2G043/MA01 2G043/MA03 2G043/NA06 2G043/NA13

JP F-Index: G01N21/63/Z G01N21/67/A G01N21/67/C

**Family:**

Publication number	Publication date	Application number	Application date
CA2679029 AA	20090821	CA20082679029	20080222
CN101617219 A	20091230	CN200880005951	20080222
CN101617219 B	20121121	CN200880005951	20080222
EP2132557 A2	20091216	EP20080730554	20080222
IN04898CN2009 A	20160831	IN2009CN04898	20090820
JP2010519554 T2	20100603	JP20090551039T	20080222
US2008212074 AA	20080904	US20080036039	20080222
US2009079980 AA	20090326	US20080036045	20080222
US8355126 BB	20130115	US20080036039	20080222
WO08103937 A2	20080828	WO2008US54771	20080222
WO08103937 A3	20081106	WO2008US54771	20080222

Priority:

US20070891408P 20070223 US20080036039 20080222 US20080036045 20080222
WO2008US54771 20080222

Probable Assignee: THERMO SCIENTIFIC PORTABLE ANALYTICAL INSTRUMENTS INC

Assignee(s): (std): GOULTER JOHN E ; HAMILTON MARK ; SREETHARAN PRATHEEV ; THERMO NITON ANALYZERS LLC ; THERMO NITON ANALYZERS LLC US ; THERMO SCIENT PORTABLE ANALYTICAL INSTR INC

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Inventor(s): (std): GOULTER JOHN E ; SREETHARAN PRATHEEV ; HAMILTON MARK ; PRATHEEV SREETHARAN ; MARK HAMILTON

Inventor(s): SREETHARAN PRATHEEVUS ; GOULTER JOHN EUS ; HAMILTON MARKUS

Agent(s): FREEDMAN GORDON; SHAPIRO COHEN LLP; FROST ALEX JOHN; THERMO FINNIGAN LLC; GORDON; SUNSTEIN BRUCE D ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN

11) Family number: 42117283 (US2009050786A)

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Title: FAST AND PRECISE TIME-RESOLVED SPECTROSCOPY WITH LINEAR SENSOR ARRAY

Abstract: Time-resolved analysis of a spectrum is performed by illuminating a one-dimensional array of charge-transfer device light-sensitive pixel cells and periodically non-destructively copying charges in the light-sensitive cells to respective storage cells ("row storage registers") co-located with the light-sensitive cells in an integrated circuit. Information about the charges stored in at least some of the storage cells is provided to a component external to the integrated circuit.

Classifications:

International (IPC 8-9): G01J3/00 G01J3/02 G01J3/28 G01J3/36 G01N21/64 G01N21/67 G1J3/28 H01J40/14 H01L27/00 H01L27/148 H04N3/15 H04N5/235 H04N5/335 H04N5/345 H04N5/355 H04N5/378 H1L27/148 (Advanced/Invention); G01J3/00 G01J3/28 G01N21/62 G01N21/64 H01J40/00 H01L27/148 H04N3/15 (Core/Invention)

International (IPC 1-7): H01L27/148

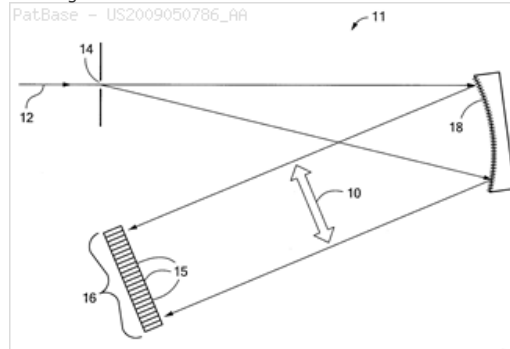
CPC: G01J3/2803 G01J3/02 G01J3/0286 H01L27/14862 H04N5/2355 H04N5/3572 H04N5/3692 H04N5/3743

European: G01J3/02 G01J3/02N G01J3/28B H04N3/15C6 H04N3/15G H04N5/235N T01L27/148D

US: 250/207 250/207P 250/208.1 250/214.00R 250/214R 356/300 356/300S

JP F-Term: 2G043 2G043/AA01 2G043/BA01 2G043/BA03 2G043/CA05 2G043/EA01 2G043/EA09 2G043/EA10 2G043/EA13 2G043/FA03 2G043/FA06 2G043/GA08 2G043/GB21 2G043/JA04 2G043/KA02 2G043/KA03 2G043/KA05 2G043/LA03 2G043/MA01 2G043/NA04 2G043/NA05 2G043/NA06 2G043/NA14

JP F-Index: G01N21/64/B G01N21/67/A

**Family:**

Publication number	Publication date	Application number	Application date
CA2679025 AA	20090821	CA20082679025	20080222
CN101647119 A	20100210	CN200880010341	20080222
CN101647119 B	20130911	CN200880010341	20080222
EP2118931 A2	20091118	EP20080730447	20080222
IN04969CN2009 A	20100122	IN2009CN04969	20090824
JP2010519551 T2	20100603	JP20090551022T	20080222
JP5286599 B2	20130911	JP20090551022T	20080222
US2009050786 AA	20090226	US20080035477	20080222
US8022349 BB	20110920	US20080035477	20080222
WO08103865 A2	20080828	WO2008US54643	20080222
WO08103865 A3	20090129	WO2008US54643	20080222

Priority:

US20070891320P 20070223 US20080035477 20080222 WO2008US54643 20080222

Probable Assignee: THERMO NITON ANALYZERS LLC

Assignee(s): (std): BAIKO DENIS ; BHASKARAN SURAJ ; HAMILTON MARK A ; JENNE JUDD ; LUNGU GEORGE ; PILON MICHAEL J ; PIRGER BRUCE ; VANGORDEN STEVEN ; THERMO NITON ANALYZERS LLC ; ZIEGLER HERB ; SWAB JOHN ; THERMO NITON ANALYZERS LLC US

Assignee(s): THERMO NITON ANALYZERS LLC900 MIDDLESEX TURNPIKEBUILDING 8BILLERICAMA01821US

Inventor(s): (std): BAIKO DENIS ; PIRGER BRUCE ; VANGORDEN STEVEN ; HAMILTON MARK A ; ZIEGLER HERB ; JENNE JUDD ; BHASKARAN SURAJ ; LUNGU GEORGE ; PILON MICHAEL J ; SWAB JOHN ; PILON MICHAEL ; ZIEGLER HERBERT ; HAMILTON MARK ; JOHN SWAB ; DENIS BAIKO ; GEORGE LUNGU ; HERB ZIEGLER ; SURAJ BHASKARAN ; JUDD JENNE ; BRUCE PIRGER ; STEVEN VANGORDEN

Inventor(s): PIRGER BRUCEUS ; HAMILTON MARK AUS ; JENNE JUDDUS ; PILON MICHAEL JUS ; LUNGU GEORGEUS ; BHASKARAN SURAJUS ; ZIEGLER HERBUS ; SWAB JOHNUS ; VANGORDEN STEVENUS ; BAIKO DENISUS

Agent(s): FREEDMAN GORDON; FREEDMAN AND ASSOCIATES; SHAPIRO COHEN LLP; AVENTUM IP LAW LLP; FROST ALEX JOHN; THERMO FINNIGAN LLC; SUNSTEIN KANN MURPHY AND TIMBERS LLP; GORDON; CHARLES B; KATZ CHARLES B ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

12) Family number: 43126173 (US2009091753A)

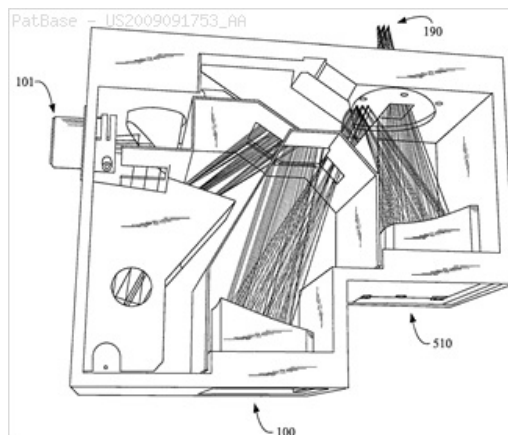
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Title: THREE MIRROR ANASTIGMAT SPECTROGRAPH

Abstract: A spectrograph including a primary mirror, a secondary mirror, and a tertiary mirror forming a TMA having a common vertex axis. The spectrograph also may include a collimating mirror, a diffraction grating, and a dispersive prism. The collimating mirror and an entrance aperture form an interchangeable module. Radiation received through the entrance aperture is reflected in a collimated pattern towards an aperture stop. The diffraction grating, located between the collimating mirror and prism, diffracts radiation passed through the aperture stop into multiple beams directed onto the prism. A flat mirror, located to one side of the vertex axis, receives and reflects the multiple beams exiting the prism onto the primary mirror, where they are reflected onto the secondary mirror. The secondary mirror reflects the beams to the tertiary mirror where they are reflected onto an image plane located on the other side of the vertex axis.

Classifications:

International (IPC 8-9): G01J3/18 G01J3/28 G01J3/30
G01J3/40 (Advanced/Invention);
G01J3/12 G01J3/28 (Core/Invention)
CPC: G01J3/1809 G01J3/02 G01J3/0291 G01J3/443 G01J3/0208
G01J3/021 G01J3/0229 G01J3/0262 G01J3/027 G01J3/0256 G01J3/0272
G01J3/18 G01J3/2803 G01J3/2823
European: G01J3/02 G01J3/02B1 G01J3/02B2 G01J3/02B8 G01J3/02C
G01J3/02D G01J3/02G G01J3/02H G01J3/02R G01J3/18 G01J3/18C
G01J3/28B G01J3/28D G01J3/443
US: 356/303 356/303P 356/305 356/305P 356/305S 356/318 356/328



Family:

Publication number	Publication date	Application number	Application date
US2009091753 AA	20090409	US20080246232	20081006
US2009316146 AA	20091224	US20090551375	20090831
US7936454 BB	20110503	US20090551375	20090831
US7936455 BB	20110503	US20080246232	20081006

Priority:

US20070977936P 20071005 US20080246232 20081006 US20090551375 20090831

Probable Assignee: BEARDSLEY BURT JAY

Assignee(s): (std): BEARDSLEY BURT JAY ; BEARDSLEY WENDY LYNN

Inventor(s): (std): BEARDSLEY WENDY LYNN ; BEARDSLEY BURT JAY

Agent(s): DALE F REGELMAN; QUARLES AND BRADY LLP; DALE F

13) Family number: 43160050 (US2009103088A)

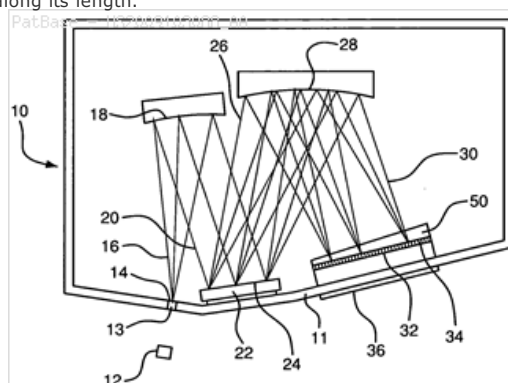
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Title: SPECTROMETER WITH CYLINDRICAL LENS FOR ASTIGMATISM CORRECTION AND DEMAGNIFICATION

Abstract: A spectrometer which in one embodiment including a dispersive element and a concave element. The dispersive element may be a flat or concave grating which receives light and reflects the light in different collimated wavelengths. The concave element being located downstream from the dispersive element and arranged to reflect and focus the light toward a detector. The reflected light from the concave element including astigmatism. A cylindrical lens positioned between the concave element and the detector and configured to simultaneously correct the astigmatism and demagnify the light across the detector. In one embodiment the cylindrical lens varies in thickness progressively along its length.

Classifications:

International (IPC 8-9): G01J3/02 G01J3/18
G01J3/28 (Advanced/Invention);
G01J3/00 G01J3/12 G01J3/28 (Core/Invention)
CPC: G01J3/2803 G01J3/02 G01J3/0208 G01J3/18 G02B27/0025
European: G01J3/02 G01J3/02B1 G01J3/18 G01J3/28B G02B27/00K
US: 356/326 356/326S 356/328 356/328P



Family:

Publication number	Publication date	Application number	Application date
DE602008026381 D1	20130926	DE200860026381T	20081017
DK2051050 T3	20131104	DK20080305701T	20081017
EP2051050 A2	20090422	EP20080305701	20081017
EP2051050 A3	20091223	EP20080305701	20081017
EP2051050 B1	20130731	EP20080305701	20081017
EP2518458 A1	20121031	EP20120172487	20081017
EP2518459 A1	20121031	EP20120172493	20081017
US2009103088 AA	20090423	US20070975052	20071017
US7812949 BB	20101012	US20070975052	20071017

Priority:

US20070975052 20071017 EP20080305701 20081017 EP20080305701 20081017

Probable Assignee: HORIBA INSTRUMENTS INC

Assignee(s): (std): HORIBA INSTR INC ; HORIBA JOBIN YVON INC

Assignee(s): HORIBA JOBIN YVON INC EDISON ; HORIBA INSTRUMENTS INC
Inventor(s): (std): BARATANGE FRANCOIS ; DELMAS REMY ; BARANTANGE FRANCOIS ; BARATANGE FRANACOIS
Agent(s): PATENTANWAELTE VOLLMANN AND HEMMER; MICHELET ALAIN; CORALIS HARLE; BROOKS KUSHMAN PC
Designated states: AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK TR

14) Family number: 49866752 (US8049886B)

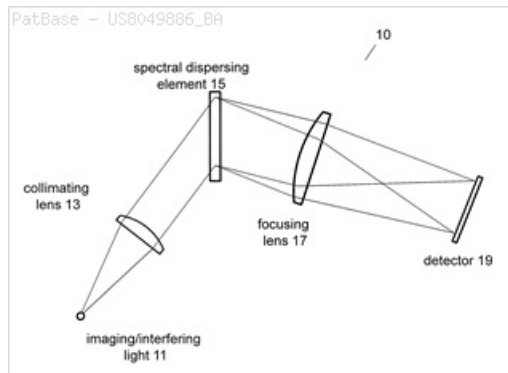
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Title: SPECTROMETER WITH ADJUSTABLE-DEFLECTOR-CONTROLLED ALIGNMENT FOR OPTICAL COHERENCE TOMOGRAPHY

Abstract: A spectrometer is presented that can include a spectrally dispersive optical element to spectrally disperse a received light, a leveraged-optics adjustable deflector to adjustably deflect the spectrally dispersed light, and a detector array to receive the spectrally dispersed and adjustably deflected light. The received light can include an interference beam combined from a returned image beam and a reference beam in a Spectral Domain Optical Coherence Tomograph. The detector array can include a linear sensor array. The leveraged-optics adjustable deflector can include an optical element with an adjustable transmissive property or an adjustable reflective property, wherein the adjustable deflector is adjustable by a mechanical adjustment being optically leveraged into a smaller optical adjustment.

Classifications:

International (IPC 8-9): G01B9/02 G01J3/02 G01J3/28 G01J3/453
G01N21/17 G02B26/08 (Advanced/Invention)
CPC: G01B9/02044 G01B9/02091 G01J3/0205 G01J3/0237 G01J3/0289
G01J3/453 G02B26/0891 G01J3/02
European: G01J3/02 G01J3/02B G01J3/02B11 G01J3/02Q G01J3/453
G02B26/08R2W
US: 356/326
JP F-Term: 2G059 2G059/EE09 2G059/HH08 2G059/JJ03 2G059/JJ05
2G059/JJ06 2G059/JJ11 2G059/KK04 2G059/LL01 2G059/MM14
2G059/NN02 2G059/NN03 2G059/NN06
JP F-Index: G01N21/17/630



Family:

Publication number	Publication date	Application number	Application date
AU2011316508 AA	20120419	AU20110316508	20111013
AU2011316508 BB	20150611	AU20110316508	20111013
BR112013009188 A2	20160726	BR20131109188	20111013
CA2811921 AA	20130320	CA20112811921	20111013
CA2811921 C	20170704	CA20112811921	20111013
CN103250035 A	20130814	CN201180049294	20111013
CN103250035 B	20170301	CN201180049294	20111013
DE602011026218 D1	20160616	DE201160026218T	20111013
DK2627978 T3	20160815	DK20110771380T	20111013
EP2627978 A1	20130821	EP20110771380	20111013
EP2627978 B1	20160504	EP20110771380	20111013
ES2585633 T3	20161007	ES20110771380T	20111013
IN01064KN2013 A	20130906	IN2013KN01064	20130416
JP2013543120 T2	20131128	JP20130533988T	20111013
JP5947306 B2	20160706	JP20130533988T	20111013
KR101792775 B1	20171101	KR20137012304	20111013
KR20130138262 A	20131218	KR20137012304	20111013
MX2013003955 A1	20130605	MX20130003955	20111013
PL2627978 T3	20161130	PL20110771380T	20111013
PT2627978 T	20160803	PT20110771380T	20111013
RU2013121897 A	20141120	RU20130121897	20111013
RU2589505 C2	20160710	RU20130121897	20111013
TR201610489 T4	20160822	TR20160010489T	20111013
TW201229466 A	20120716	TW20110137133	20111013
TWI504866 B	20151021	TW20110137133	20111013
US8049886 BA	20111101	US20100904681	20101014
WO12051363 A1	20120419	WO2011US56051	20111013

Priority:

US20100904681 20101014 EP20110771380 20111013 WO2011US56051 20111013

Probable Assignee: ALCON LENSX INC

Assignee(s): (std): ALCON LENSX INC ; ALKON LENSXS INK ; RAKSI FERENC

Assignee(s): ALCON LENSX INC ALISO VIEJO

Inventor(s): (std): RAKSI FERENC ; RAKSHI FERENTS ; FERENC RAKSI

Inventor(s): RAKSI FERENC MISSION VIEJO

Agent(s): PHILLIPS ORMONDE FITZPATRICK; KIRBY EADES GALE BAKER; HANRATTY CATHERINE; CURELL MIREIA; AOKI ATSUSHI; SHIMADA TETSURO; HALISE BETUEL ATABAY VARLIK; GERGELY T; GERGELY T ZIMANYI ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY

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MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY
SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

15) Family number: 49886858 (US2011268445A)

PatBase

Title: OPTICALLY VARIABLE FILTER ARRAY APPARATUS

Abstract: In an optically variable filter array apparatus, WDM-signal light beams of m channels ranging in wavelength from λ_1 to λ_n from optical fibers **11-1** to **11-m** enter wavelength dispersion element **17**. Wavelength dispersion element **17** disperses incident light beams in different directions according to their wavelengths. In lens **18**, light beams of different channels are turned into strip-like parallel light beams and developed over xy plane according to channel and wavelength. Wavelength selection element **19** has pixels arranged in lattice pattern, for bringing a pixel at a position corresponding to to-be-selected channel and wavelength into a reflective state. Light beams reflected from wavelength selection element **19** pass through the same path to exit from optical fibers **15-1** to **15-m**. By changing reflection characteristics of wavelength selection element **19** on a pixel-by-pixel basis, characteristics of optical filter can be varied, so that desired wavelengths of given WDM light can be selected.

Classifications:

International (IPC 8-9): G02B26/00 G02B26/02 G02F1/061 G02F1/13 H04B10/00 H04J14/02 (Advanced/Invention)

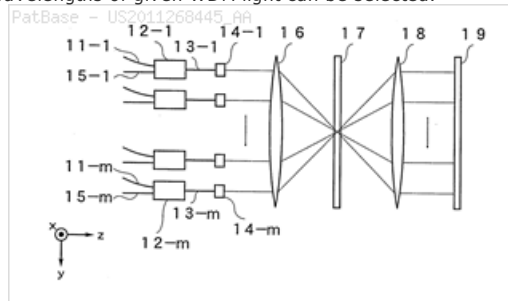
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European: G02B6/293D2T G02B6/293D2V G02B6/293W10 G02B6/35N8 H04J14/02 H04J14/02A1R S02B6/293M2 S02B6/35E2 T04J14/02A1R2

US: 398/138 398/139 398/79 398/79P

JP F-Term: 2H079 2H079/AA02 2H079/AA12 2H079/BA02 2H079/BA03 2H079/BA06 2H079/CA07 2H079/DA08 2H079/EB17 2H079/GA05 2H079/KA08 2H079/KA09 2H088 2H088/EA49 2H088/HA02 2H088/HA06 2H088/HA18 2H088/HA21 2H088/HA24 2H088/MA20 2H141 2H141/MA04 2H141/MA06 2H141/MA07 2H141/MA23 2H141/MA26 2H141/MB24 2H141/MB63 2H141/MC06 2H141/MC10 2H141/MD13 2H141/MD20 2H141/MD23 2H141/MD24 2H141/MD32 2H141/MD38 2H141/ME01 2H141/ME04 2H141/ME06 2H141/ME09 2H141/ME13 2H141/ME17 2H141/ME23 2H141/ME29 2H141/MF22 2H141/MF30 2H141/MG01 2H141/MZ16 2K102 2K102/AA21 2K102/BA05 2K102/BA16 2K102/BB01 2K102/BB03 2K102/BB04 2K102/BB05 2K102/BC04 2K102/BD02 2K102/DB08 2K102/DC09 2K102/DD02 2K102/EA02 2K102/EA14 2K102/EA19 2K102/EA21 2K102/EB00 2K102/EB08 2K102/EB10 2K102/EB11 2K102/EB14 2K102/EB16

JP F-Index: G02B26/00 G02B26/02/E G02B6/35 G02F1/01/D G02F1/13/505



Family:

Publication number	Publication date	Application number	Application date
JP2011232695 A2	20111117	JP20100105401	20100430
US2011268445 AA	20111103	US20100878571	20100909
US8463125 BB	20130611	US20100878571	20100909

Priority:

JP20100105401 20100430

Probable Assignee: SANTEC CORP

Assignee(s): (std): SAKURAI YASUKI ; SANTEC CORP ; SANYO ENG AND CONSTRUCTION INC ; SANYO ENGINEER AND CONSTRUCTION INC

Inventor(s): (std): SAKURAI YASUKI

Agent(s): MCGLEW AND TUTTLE P C; MCGLEW AND TUTTLE PC

16) Family number: 50015732 (US2011293281A)

PatBase

Title: OPTICALLY VARIABLE FILTER ARRAY APPARATUS

Abstract: In an optically variable filter array apparatus, WDM-signal light beams of m channels ranging in wavelength from λ_1 to λ_n from optical fibers **11-1** to **11-m** enter wavelength dispersion element **17** through concave mirror **16**. Wavelength dispersion element disperses incident light beams in different directions according to their wavelengths and direct them to a concave mirror **18**. In concave mirror, light beams of different channels are turned into strip-like parallel light beams and developed over xy plane according to channel and wavelength. Wavelength selection element **19** has pixels arranged in lattice pattern, for bringing a pixel at a position corresponding to to-be-selected channel and wavelength into a reflective state. Light beams reflected from wavelength selection element pass through the same path to exit from optical fibers **15-1** to **15-m**. By changing reflection characteristics of wavelength selection element on a pixel-by-pixel basis, desired wavelengths of given WDM light can be selected.

Classifications:

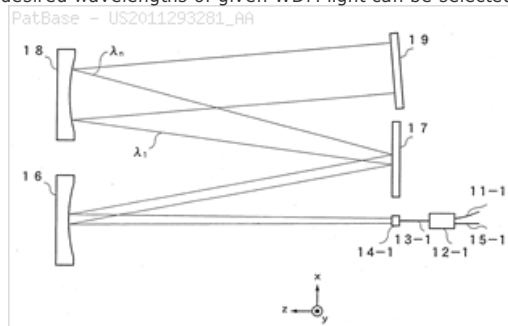
International (IPC 8-9): G02B26/00 G02B26/08 G02B6/293 G02B6/32 G02F1/061 G02F1/1335 H04B10/00 H04J14/02 (Advanced/Invention)

CPC: G02B6/2931 G02B6/2938 H04J14/0202

European: G02B6/293D2R G02B6/293W2 T04J14/02A1

US: 398/138 398/139 398/79 398/79P

JP F-Term: 2H079 2H079/AA02 2H079/AA12 2H079/BA01 2H079/BA04 2H079/CA07 2H079/DA08 2H079/GA05 2H079/KA01 2H079/KA05 2H079/KA11 2H079/KA14 2H137 2H137/AA02 2H137/AB01 2H137/BA01 2H137/BC01 2H137/BC17 2H137/BC23 2H137/BC32 2H137/BC41 2H137/BC52 2H137/BC55 2H137/BC62 2H141 2H141/MA12 2H141/MA13 2H141/MA21 2H141/MA28 2H141/MB24 2H141/MB63 2H141/MD13 2H141/MD20 2H141/ME04 2H141/ME06 2H141/ME09 2H141/MF28 2H141/MG01 2H141/MZ14 2H191 2H191/FA01 2H191/FA31 2H191/FA56 2H291 2H291/FA01 2H291/FA31 2H291/FA56 2K006 2K102 2K102/AA21 2K102/BA07 2K102/BA26 2K102/BB00 2K102/BB04 2K102/BC04 2K102/BD02 2K102/CA20 2K102/DC09 2K102/DD02 2K102/EB02 2K102/EB08 2K102/EB10 2K102/EB14



Family:

Publication number	Publication date	Application number	Application date
JP2011248196 A2	20111208	JP20100122689	20100528
US2011293281 AA	20111201	US20100878599	20100909
US8463126 BB	20130611	US20100878599	20100909

Priority:

JP20100122689 20100528

Probable Assignee: SANTEC CORP

Assignee(s): (std): SAKURAI YASUKI ; SANTEC CORP ; SANYO ENG AND CONSTRUCTION INC ; SANYO ENGINEER AND CONSTRUCTION INC

Inventor(s): (std): SAKURAI YASUKI

Agent(s): MCGLEW AND TUTTLE P C; MCGLEW AND TUTTLE PC

17) Family number: 57668159 (CN104121989A)

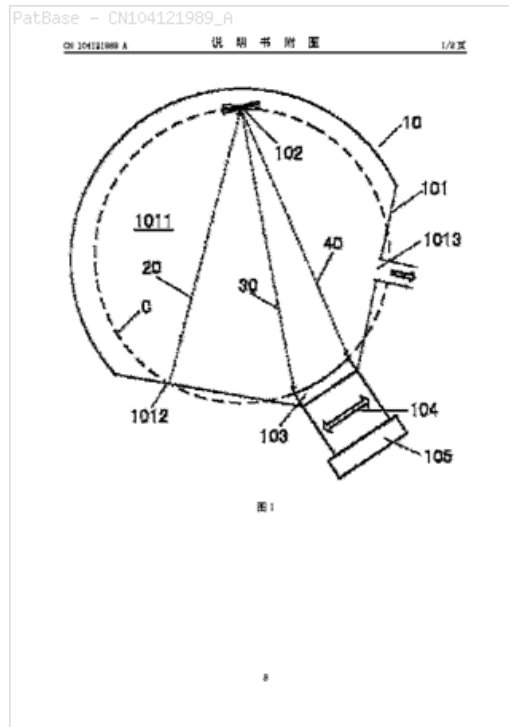
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Title: MULTI-GRATING VACUUM ULTRAVIOLET SPECTROMETER

Abstract: The invention discloses a multi-grating vacuum ultraviolet spectrometer. The multi-grating vacuum ultraviolet spectrometer comprises a vacuum part, a vacuum part, a concave grating array, a fluorescent plate for converting vacuum ultraviolet light of different wavelength ranges into visible light of different wavelength ranges, a lens imaging system and a collecting device, wherein a vacuum cavity is positioned in the vacuum part, and a wall of the vacuum cavity is provided with an inlet slit. The concave grating array is arranged in the vacuum cavity and comprises a plurality of concave gratings arranged in the first direction, the first direction is perpendicular to the incident plane of the vacuum ultraviolet light, and the deflection angles of the concave gratings are different from each other. The fluorescent plate, the inlet slit and the concave grating array are located on an identical Rowland circle. The lens imaging system is opposite to the fluorescent plate, and the collecting device is opposite to the lens imaging system. The multi-grating vacuum ultraviolet spectrometer can collect vacuum ultraviolet spectrum of a wide range.

Classifications:

International (IPC 8-9): G01J3/28 (Advanced/Invention)



Family:

Publication number	Publication date	Application number	Application date
CN104121989 A	20141029	CN201410345840	20140718
CN104121989 B	20170215	CN201410345840	20140718

Priority:

CN201410345840 20140718

Probable Assignee: UNIV TSINGHUA

Assignee(s): (std): TSINGHUA UNIV ; UNIV TSINGHUA

Inventor(s): (std): PU YIKANG ; CHENG ZHIWEN ; TAN YI ; CHEN LIANGYAO

18) Family number: 57874017 (CN203965040U)

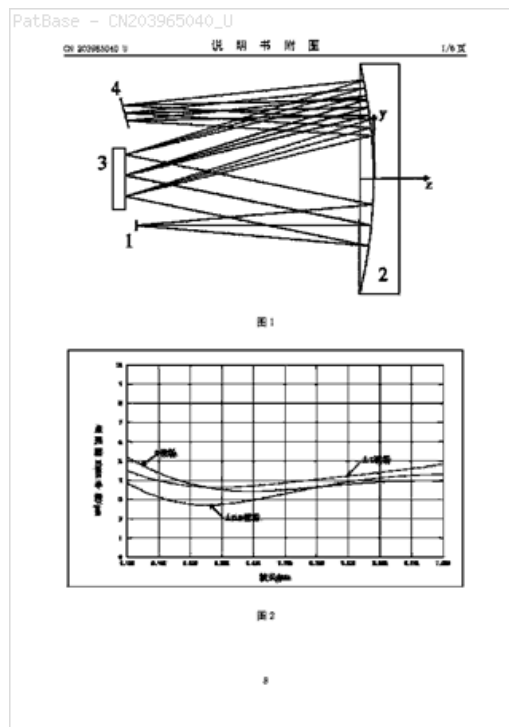
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Title: IMAGING SPECTROMETER BEAM-SPLITTING SYSTEM BASED ON SINGLE FREE-FORM SURFACE

Abstract: The utility model discloses an imaging spectrometer beam-splitting system based on a single free-form surface. The system is composed of an incident slit, a free-form surface reflector, a plane blazed grating and an image plane. The system is characterized in that the non-rotationally-symmetric free-form surface reflector is used twice as a collimating lens and an imaging lens respectively, and the plane blazed grating which has high performance and adopts a sophisticated processing technology is employed, thus forming the spectrometer beam-splitting system with a simple and compact structure, small aberration, low distortion and high efficiency. According to the embodiment of the imaging spectrometer beam-splitting system based on a single free-form surface, good spectral imaging is realized in the visible near-infrared spectrum range of 400-1000nm, and spherical aberration, coma aberration, astigmatism, spectral distortion and spectral line bend are well corrected on the premise of ensuring a simple and compact system. The imaging spectrometer beam-splitting system of the utility model can be applied to the hyper-spectral imaging field of aerospace and aviation.

Classifications:

International (IPC 8-9): G01J3/02 (Advanced/Invention)



Family:

Publication number	Publication date	Application number	Application date
CN104406691 A	20150311	CN201410258825	20140612
CN104406691 B	20170627	CN201410258825	20140612
CN203965040 U	20141126	CN201420312121U	20140612

Priority:

CN201410258825 20140612 CN201420312121U 20140612

Probable Assignee: SHANGHAI TECH PHYSICS INST

Assignee(s): (std): SHANGHAI INST OF TECHNICAL PHYSICS CHINESE ACADEMY OF SCIENCES ; SHANGHAI TECH PHYSICS INST

Inventor(s): (std): HE ZHIPING ; YUAN LIYIN ; KUANG YAOWU ; SHU RONG ; CHEN SHUANG ; ZHANG XIAOWEI ; HOU JIA

19) Family number: 59457167 (EP2881730A1)

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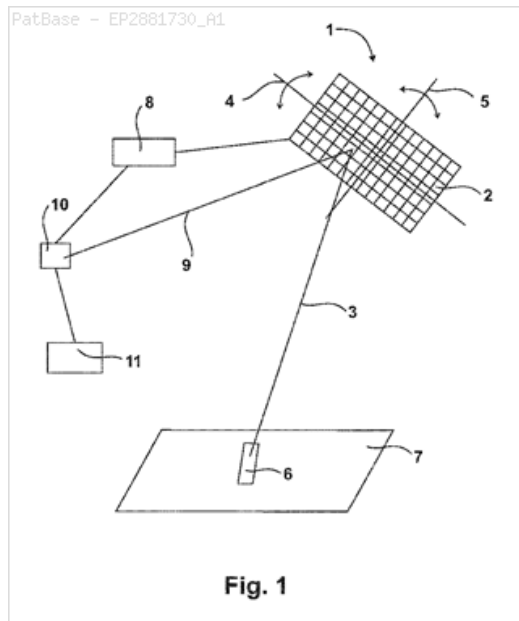
Title: DEVICE AND METHOD FOR DETERMINING SPECTRAL PROPERTIES OF A SURFACE PROCEDE ET DISPOSITIF DE DETERMINATION DE PROPRIETES SPECTRALES D'UNE SURFACE </TI_F

Abstract: Source: EP2881730A1 [DE] Die Erfindung betrifft eine Vorrichtung (1) zur insbesondere linienfoermigen oder bereichsweisen Ermittlung spektraler Eigenschaften einer Oberflaeche, umfassend zumindest ein bewegbar angeordnetes, dispersives Element (2) zur spektralen Zerlegung von Licht (3). Erfindungsgemaess ist vorgesehen, dass das zumindest eine disperse Element (2) um zwei Achsen (4, 5) auslenkbar angeordnet ist. Weiter betrifft die Erfindung eine Verwendung einer erfindungsgemaessen Vorrichtung (1). Des Weiteren betrifft die Erfindung ein Verfahren zur insbesondere linienfoermigen oder bereichsweisen Ermittlung spektraler Eigenschaften einer Oberflaeche, wobei zumindest ein dispersives Element (2) zur spektralen Zerlegung von Licht (3) bewegbar angeordnet wird. **Machine translation:** The invention relates to a device (1) for particular linienfoermigen or area-wise determination of spectral properties of a surface, comprising at least one movable arranged, dispersive element (2) for the spectral decomposition of light (3). Erfindungsgemaess it is provided that the at least one dispersive element (2) about two axes (4, 5) is arranged deflectable. The invention further relates to a use of the inventive device (1). Furthermore, the invention relates to a method for particular linienfoermigen or area-wise determination of spectral properties of a surface, wherein at least one dispersive element (2) for the spectral decomposition of light (3) is arranged to be movable.

Classifications:

International (IPC 8-9): G01N21/25 G01N21/88 (Advanced/Invention)

CPC: G01N21/25 G01N21/251 G01N21/8806 G01J3/18 G01N21/255 G01J3/06



Family:

Publication number	Publication date	Application number	Application date
AT515139 A1	20150615	AT20130050804	20131205
AT515139 B1	20150915	AT20130050804	20131205
EP2881730 A1	20150610	EP20140195919	20141202

Priority:

AT20130050804 20131205

Probable Assignee: CTR CARINTHIAN TECH RES AG

Assignee(s): (std): CTR CARINTHIAN TECH RES AG

Assignee(s): CTR CARINTHIAN TECH RESEARCH AG

Inventor(s): (std): KENDA ANDREAS ; KENDA ANDREAS DR ; TORTSCHANOFF ANDREAS ; TORTSCHANOFF ANDREAS DR

Agent(s): WIRNSBERGER GERNOT

Designated states: AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC ME MK MT NL NO PL PT RO RS SE SI SK SM TR

20) Family number: 60579357 (CN104978588A)

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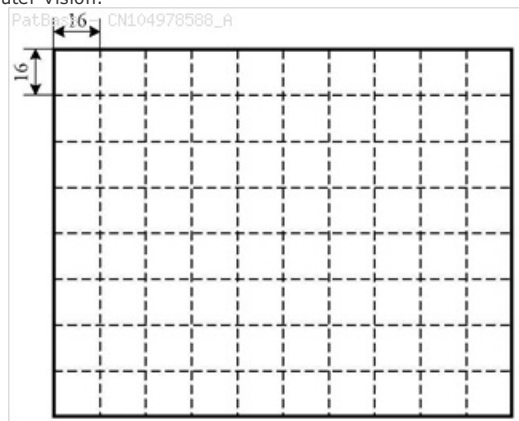
Title: FLAME DETECTION METHOD BASED ON SUPPORT VECTOR MACHINE

Abstract: The invention provides a flame detection method based on a support vector machine. An image is subjected to partitioning processing, the multiple statistical characteristics of each sub block is calculated block by block, a character vector is formed, an offline build support vector machine model is used to identify whether a sub block is a flame area, the method is simple and practicable has high real-time performance. The method does not involve a video sequence and so is unrelated with the movement possibly existing in a lens. Therefore, according to the method, whether the image has a flame zone can be detected, the stability of a detection result is ensured, and the real-time requirement is satisfied. The method is suitable for the field of forest fire detection and large venue fire detection based on computer vision.

Classifications:

International (IPC 8-9): G06K9/46 G06K9/62 (Advanced/Invention)

CPC: G06K9/6269 G06K9/4647



Family:

Publication number	Publication date	Application number	Application date
CN104978588 A	20151014	CN201510423393	20150717
CN104978588 B	20181228	CN201510423393	20150717

Priority:

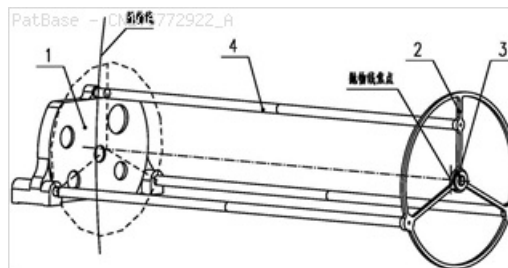
CN201510423393 20150717

Probable Assignee: UNIV SHANDONG**Assignee(s):** (std): SHANDONG UNIV ; UNIV SHANDONG**Inventor(s):** (std): ZHANG XINGYU ; YANG YANG ; LIU ZHAOGUANG**21) Family number: 65907671** (CN106772922A)

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Title: MULTISPECTRAL PORTABLE LARGE-DIAMETER INLAID MIRROR AXIS CALIBRATOR

Abstract: The invention provides a multispectral portable large-diameter inlaid mirror axis calibrator, comprising a large-diameter inlaid mirror component, support rods, a planet support, and a target; the large-diameter inlaid mirror component is processed by combining a large-diameter inlaid mirror body and optical glass inlaid thereon according to a parabolic curve, a focal point of the parabolic curve and the center of circle of the planet support are on a same horizontal line. The supports are screwed to the large-diameter inlaid mirror component sequentially, the support rods are then sleeved with the planet support, a hollow cylinder of the planet support is sleeved with the target component, and assembly and adjustment of the multispectral portable large-diameter inlaid mirror axis calibrator are finished. The multispectral portable large-diameter inlaid mirror axis calibrator is ready for calibration work just after assembly, and therefore the multispectral portable large-diameter inlaid mirror axis calibrator is easy to assemble, simple in structure and convenient to disassemble and assemble; the large-diameter inlaid mirror component is processed by combining the inlaid optical glass, the rapid increase in the processing cost due to the use of large-diameter optical glass is avoided, the weight is reduced greatly, and the needs of grassroots units for mass equipment are met.

Classifications:**International (IPC 8-9):** G02B7/182 G02B7/183 (Advanced/Invention)**CPC:** G02B7/183 G02B7/1822**Family:**

Publication number	Publication date	Application number	Application date
CN106772922 A	20170531	CN201710061771	20170126
CN106772922 B	20190702	CN201710061771	20170126

Priority:

CN201710061771 20170126

Probable Assignee: XI AN APPLIED OPTICS INST**Assignee(s):** (std): XI AN APPLIED OPTICS INST**Assignee(s):** XI AN INST OF APPLIED OPTICS**Inventor(s):** (std): SHI XIN ; HU BO ; MENG HAIJIANG ; HOU JUNZHAN ; DUAN HONGJIAN ; GAO JUN ; CHANG WEIJUN ; XIA YUANJIE ; WANG JIANJUN