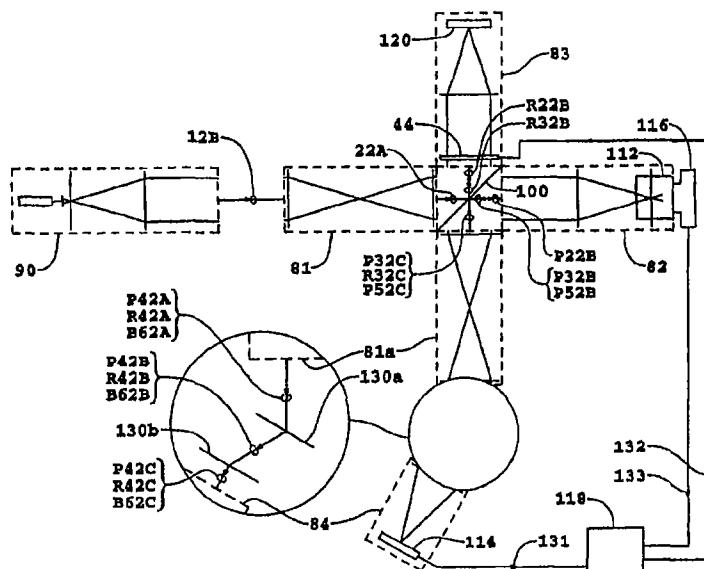




INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁷ : G01B 9/02	A1	(11) International Publication Number: WO 00/55572 (43) International Publication Date: 21 September 2000 (21.09.00)
(21) International Application Number: PCT/US00/06914 (22) International Filing Date: 16 March 2000 (16.03.00) (30) Priority Data: 60/125,057 18 March 1999 (18.03.99) US (71) Applicant: ZETETIC INSTITUTE [US/US]; Suite 206, 1665 E. 18th Street, Tucson, AZ 85719 (US). (72) Inventor: HILL, Henry, A.; 340 S. Avenida de Palmas, Tucson, AZ 85716 (US). (74) Agent: HOFFMAN, Charles, R.; Cahill, Sutton & Thomas P.L.C., Suite 155, 2141 E. Highland, Phoenix, AZ 85016 (US).		(81) Designated States: CA, CN, JP, KR, MX, SG, Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published <i>With international search report.</i>
		 *G00001*

(54) Title: MULTIPLE LAYER CONFOCAL INTERFERENCE MICROSCOPY USING WAVENUMBER DOMAIN REFLECTOMETRY AND BACKGROUND AMPLITUDE REDUCTION AND COMPENSATION



(57) Abstract

An in-focus image of an information-bearing region within and/or on a substance is discriminated from an out-of focus image so as to reduce errors in image information of the substance by producing a probe beam and a reference beam from a wideband point source (90a), producing antisymmetric spatial properties in the reference beam (83), converting the probe beam (81b) to a beam focused to a line in the region, producing antisymmetric spatial properties in the in-focus return probe beam.

