



Wallace H. Coulter Patent Portfolio

No.	Patent#	Submitted	Issued	Names	Assignee	Title
1.	US2622150	1/13/1949	12/16/1952	WHC	Self	Interference Eliminating Device for Measuring Instruments
2.	USRE24204	3/21/1949	11/17/1953	WHC	Self	Amplifier circuit having series-connected tubes
	RI US2659775	3/21/1949	8/28/1956	WHC	Self	Amplifier circuit having series-connected tubes (13 CLAIMS)
3.	US2656508	8/27/1949	10/20/1953	WHC	Self	Means for counting particles suspended in a fluid
4.	US2712504	8/24/1951	7/5/1955	WHC	Self	Apparatus for treatment of fluids requiring sterilization or pasteurization (5 claims)
5.	US2733604	11/27/1951	2/7/1956	WHC	Self	Electromagnetic Flow Meter
6.	US2799216	8/24/1951	7/16/1957	WHC	Self	Apparatus for treatment of fluids requiring sterilization or pasteurization (3 Claims)
7.	US2763733	3/21/1952	9/18/1956	WHC	Self	Amplifier having series-connected output tubes (4 claims)
8.	US2743321	3/21/1952	8/24/1956	WHC	Self	Amplifier having series-connected output tubes (24 claims)
9.	US2869078	5/9/1956	1/13/1959	WHC & JRC	CE	Fluid Metering apparatus
10.	US3122431	12/29/1958	2/25/1964	WHC, FLH, RHB	CE	Method of making a scanner element for particle analyzers
11.	US2985830	12/29/1958	5/23/1961	WHC, RHB, FLH	CD	Scanner Element for particle Analyzers
12.	US3015775	1/9/1959	1/2/1962	WHC & JRC	CE	Fluid Metering System and Apparatus
13.	US3295059	8/19/1959	12/27/1966	WHC, WRH, JPM, WAC	CE	Particle Studying device pulse analyzer
14.	US3259842	8/19/1959	7/5/1966	WHC, WRH, JPM, WAC	CE	Particle analyzing device
15.	US3331950	2/27/1961	7/18/1967	WHC & AS	CE	Particle distribution plotting apparatus
16.	US3138294	11/17/1960	6/23/1964	WHC, JRC, WAC	CE	Automatic Diluting Apparatus
17.	US3271671	4/6/1961	9/6/1966	WHC	CE	Particle analyzing device
18.	US3392331	4/6/1961	7/9/1968	WHC	CE	Particle analyzer threshold level control
19.	US3216240	8/30/1962	11/9/1965	WHC	CE	Automatic Coagulometer Apparatus
20.	US3138290	8/31/1962	1/23/1964	WHC	CE	Automatic Diluting apparatus
21.	US3361965	3/26/1964	1/2/1968	WHC & JRC	CE	Electronic particle study apparatus with improved aperture tube
22.	US3259891	5/1/1961	7/5/1966	WHC & WRH	CE	Debris Alarm
23.	US3389334	7/14/1964	6/18/1968	WHC & WRH	CE	Particle analyzing apparatus having means for observing a scanning aperture
24.	US3395343	7/21/1964	7/30/1968	CTM & WHC	CE	Electronic particle study apparatus and vessel construction therefore
25.	US3473010	3/22/1965	10/14/1969	LBB, WRH, WHC, ELD	CE	Apparatus and method for determining mean particle volume
26.	US3439267	10/20/1965	4/15/1969	WHC & WRH	CE	Automatic hematocrit measuring apparatus



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27.	US3444464	11/26/1965	5/13/1969	WHC & WRH	CE	Multiple aperture fittings for particle analyzing apparatus
28.	US3444463	2/14/1966	5/13/1969	WHC & WRH	CE	Particle analyzing apparatus and method utilizing multiple apertures
29.	US3502974	5/23/1966	3/24/1970	WHC & WRH	CE	Signal modulated apparatus for generating and detecting resistive and reactive changes in a modulated current path for particle classification and analysis
30.	US3557352	11/1/1967	1/9/1971	WRH & WHC	CE	Apparatus and methods for measuring a dividing particle size of a particulate system
31.	US3502973	3/18/1968	3/24/1970	WHC & WRH	CE	Collating Apparatus for pairs of electrical pulses produced
32.	US3567389	4/3/1968	3/2/1971	WHC & WFR	CE	Fluid transfer valve structure
33.	US3622795	10/10/1968	11/23/1971	ELD, RIK, RLK, WHC	CE	Colorimetric fluid test apparatus having plural fluid sequential control
34.	US3580686	3/17/1969	5/25/1971	WHC	CE	Vessel having intersample anticontamination construction
35.	US3603875	5/12/1969	9/7/1971	WHC & WRH	CE	Particle analyzing methods and apparatus employing apertures and multiple channels per aperture (35 Claims)
36.	US3628140	11/6/1969	12/14/1971	WRH & WHC	CE	Scanning element and aperture wafer for electronic particle counting and sizing apparatus
37.	US3757213	5/25/1970	9/4/1973	WHC & WRH	CE	Particle size analyzing apparatus and method using threshold level control
38.	US3743424	11/19/1970	7/3/1973	WHC	CE	Combined electronic and optical method and apparatus for analyzing liquid samples
39.	US3686486	12/2/1970	8/22/1972	WHC & WRH	CE	Apparatus for obtaining statistical hematological indices and analyzing same and method
40.	US3783391	2/8/1971	1/1/1974	WRH & WHC	CE	Axial trajectory sensor having gating means controlled by pulse duration measuring for electronic particle study apparatus and method
41.	US3714565	3/26/1971	1/30/1973	WHC & WRH	CE	Electronic particle analyzing apparatus with improved aperture tube
42.	US3733548	4/28/1971	5/15/1973	WHC & WRH	CE	Apparatus and method for measuring particle concentration of a suspension passing through a sensing zone
43.	US3812335	8/23/1971	5/21/1974	WHC & WRH	CE	Apparatus for obtaining statistical indices and analyzing the same and method
44.	US3836849	10/14/1971	9/17/1974	WHC, MI, PVF	CE	Method for classifying particles
45.	US3733547	1/4/1972	5/15/1973	WHC, WRH, MDL	CE	Method and apparatus for measuring particle concentration in a fluid suspension of particles
46.	US3801904	9/11/1972	4/2/1974	WRH & WHC	CE	Particle study apparatus including an axial trajectory sensor
47.	US3772604	5/12/1972	11/13/1973	WRH & WHC	CE	Non-rectifying clamps
48.	US3890568	11/6/1972	6/17/1975	WHC & WRH	CE	Method and apparatus for particle length measurement



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49.	US3810011	4/18/1973	5/7/1974	WHC & WRH	CE	Apparatus and method for analyzing the particle volume distribution for a plurality of particles of different size in a quantity of liquid
50.	US3863159	5/7/1973	1/28/1975	WHC & END	CE	Particle analyzing method and apparatus having pulse amplitude modification for particle volume linearization
51.	US3944917	8/13/1973	3/16/1976	WRH, GAL, WHC	CE	Electrical sensing circuitry for particle analyzing device
52.	US3902115	9/26/1973	8/26/1975	WRH, WHC, GG, OP, TJG	CE	Self-cleaning aperture tube for coulter study apparatus and electrolyte system therefor
53.	US3836850	10/16/1973	9/17/1974	WHC	CE	Apparatus for particulate size distribution display with means to selectively alter the display by adding predetermined DC signals to the data
54.	US3882385	2/6/1974	5/6/1975	WHC & WRH	CE	Method and apparatus for studying particles having widely different sizes
55.	US3936740	2/13/1974	2/3/1976	WRH & WHC	CE	Method and apparatus for automatically sampling pulses a predetermined average number of times for storage and subsequent reproduction
56.	US3949198	3/26/1974	4/6/1976	WHC & WRH	CE	Methods and apparatuses for correcting coincidence count inaccuracies in a Coulter type of particle analyzer
57.	US3930736	7/1/1974	7/6/1976	WHC	CE	Aperture tube with attached thief
58.	US3936741	7/2/1974	2/3/1976	WHC, WRH, END, MDL, SC	CE	Method and apparatus for providing primary coincidence correction during particle analysis utilizing time generation techniques
59.	US3944797	8/6/1974	3/16/1976	WHC & WHR	CE	Method and apparatus for determining the correct percentiles of the size distribution of a particulate system
60.	US3963984	11/4/1974	6/15/1976	WHC	CE	Method and system for cleaning an aperture in a particle study device
61.	US4009443	4/3/1975	2/22/1977	WHC, WRH, MDL, SC, END	CE	Method and apparatus for providing primary coincidence correction during particle analysis utilizing time generation techniques
62.	US3968429	7/9/1975	7/6/1976	WHC & WRH	CE	Particle analyzer of the coulter type including coincidence error correction circuitry
63.	US3961249	7/18/1975	6/1/1976	WHC	CE	Particle size distribution analyzation employing trailing edge differentiation
64.	US4281924	1/24/1979	8/4/1981	REA & WHC	CE	Reflector for the laser beam of a particle analyzer
65.	US4298836	11/23/1979	11/3/1981	MRG & WHC	CE	Particle shape determination
66.	US4325909	10/24/1980	4/20/1982	WHC & WMM	CE	Fluid transfer apparatus
67.	US4326851	10/24/1980	4/27/1982	EB, SNK, WHC	CE	Level Sensor apparatus and method
68.	US4527114	2/25/1982	7/2/1985	WHC	CE	Electrical Slit scanning apparatus
69.	US4534465	10/13/1983	8/14/1985	WFR, JPM, JWW, WHC	CE	Cassette for supporting test tubes if different diameters and/or Lengths
70.	US4609017	10/13/1983	9/2/1986	WHC & WFR	CE	Method and apparatus for transporting carriers of sealed sample tubes and missing the samples



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71.	US4775833	10/3/1986	10/4/1988	ER & WHC	CE	Lodged debris detector for a particle analyzer
72.	US4791355	10/21/1986	12/13/1988	WHC & CMR	CE	Particle analyzer for measuring the resistance and reactance of a particle
73.	US5125737	2/13/1990	6/30/1992	CMR & WHC	CE	Multipart differential analyzing apparatus utilizing light scatter techniques
74.	US5238812	5/1/1990	8/24/1993	WHC, JDH, TRR, CR, RP	CE	Method and apparatus for a rapid mixing of small volumes for enhancing biological reactions
75.	US6159740	5/17/1990	12/12/2000	JCH, TRR, CMR, WHC	CE	Method and apparatus for screening obscured or partially obscured cells
76.	US5223398	9/20/1990	6/29/1993	KHK, WHC, CR, TRR, RP	CC	Method for screening cells or formed bodies for enumeration of populations expressing selected characteristics
77.	US5348859	5/20/1991	9/20/1994	RFB, CMH, WHC	CC	Method and apparatus for obtaining an absolute white blood cell subset count and white blood cell multipart differential
78.	US5231005	3/10/1992	3/27/1993	TRR, KHK, WHC, CMR, RP, CMH, JCH	CC	Method and apparatus for screening cells or formed bodies with populations expressing selected characteristics
79.	US5260192	8/12/1992	11/9/1993	TRR, CMH, CMR, WHC	CC	Method and apparatus for screening cells or formed populations expressing selected characteristics utilizing at least one sensing parameter
80.	US5464752	4/8/1993	11/7/1995	KHK, WHC, CR, TRR, RP	CC	Automated analyzer for screening cells or formed bodies for enumeration of populations expressing selected characteristics
81.	US5468616	4/29/1993	11/21/1995	WHC, JDH, KHK, TRR, CR, RP	CC	Method and apparatus for rapid mixing of small volumes for enhancing biological reactions
82.	US5576185	11/15/1994	11/19/1996	WHC, RKZ, RJS, TRR	CC	Method of positive or negative selection of a population or subpopulation of a sample utilizing particles and gravity sedimentation
83.	US6579685	11/9/1994	6/17/2003	TRR, JCH, WHC, CMR, CMH	CIC	Method and apparatus for screening microscopic cells utilizing light scatter techniques
84.	US5653686	1/13/1995	8/5/1997	WHC & CRS	CC	Closed vial transfer method and system
85.	US6900029	11/13/1995	5/31/2005	WHC, RKZ, RJS, TRR	Miltenyi Biotec GmbH	Method of selection of a population or subpopulation JPR document of a sample utilizing particles and gravity sedimentation



Portfolio Key

WHC: Wallace H. Coulter

RI: Reissue of US2659775

CE: Coulter Electronics, Inc. Chicago, Illinois or Hialeah, FL, a corporation of Florida

CIC: Coulter International Corporation

AS: Abraham Siegelman

CJH: James C. Hudson

CMH: Constance Mary Hajek

CMR: Carlos M. Rodriguez

CR: Carlos Rodriguez

CRS: Charles R. Shambaugh

CTM: Charles T. Morgan

EB: Ernesto Bello

ELD: Ervin L. Dorman

END: Edward Neal Doty

FLH: Fred L. Heuschkel

GAL: Gerhard A. Ledholz

GG: Guenter Ginsberg

JCH: James C Hudson

JDH: John D. Hollinger

JRC: Joseph Coulter

JPM: Joseph P. Moran

JPM: John P. Matthews (#69)

JWW: James W. Walker

KHK: Kenneth H. Kortright

LBB: Leo B. Bloomfield

MDL: Millard D. Longman

MI: Marylou Ingram

MRG: Michael R. Groves

OP: Oscar Proni

PVF: P Ferro

REA: Robert E. Auer

RHB: Robert H Berg

RIK: Robert I Klein

RJS: Robert J. Schmittling

RKZ: Robert K Zwerner

RLK: Robert L. Kreiselman

RP: Ronald Paul

SC: Stephen Campbell

SNK: Steven N. Kolber

TJG: Thomas J Godin

TRR: Thomas Russell

WAC: William Anthony Claps

WFR: William F. Rothermel

WRH: Walter R. Hogg

