

Doc Tillyer listing of his 157 AO Patents / inventions from Tim Tillyer Book				Dick Whitney	Updated 28-June-11	
	Date of Application	Final Patent Number	Title of Patent	Names	Summary	Date of Final Issue
1	6-Sep-16	1308820	Process of Molding Lenses	E.D.Tillyer/H.H.Styll	Heating and polishing lenses to form mold	8-Jul-19
2	29-Nov-16	1406782	Lens	E.D.Tillyer	Improved Constructiton of Bifocal one piece, elimanates Image jump	14-Feb-22
3	27-Dec-16	1340189	Lens	E.D.Tillyer	Cement used to fuse glass	18-May-20
4	2-Jan-17	1315667	Ophthalmic Lens	E.D.Tillyer/H.W.Hill/H.H.Styll	Off Axis Correctiton via Base Curve	9-Sep-19
5	2-Jan-17	1346172	Illuminattion	E.D.Tillyer/L.W.Bugbee	Cooler Filament Light Bulb	13-Jul-20
6	27-Mar-17	1385162	Motion Picture Projection Apparatus	E.D.Tillyer	Prism to project/keep film cool	19-Jul-21
7	5-May-17	1287793	Gold Film	E.D.Tillyer/M.Bishop	Less expensive way to apply gold film	17-Dec-18
8	26-Oct-17	1404668	Eye Protector	E.D.Tillyer	Lens mounting of Acetate to improve Impact Resistance	24-Jan-22
9	30-Nov-17	1347766	Lens Grinder	E.D.Tillyer/L.W.Bugbee	One piece bifocal grinding, auto tuning	27-Jul-20
10	24-Jun-19	1356670	Lens	E.D.Tillyer	Eye rotation, aperture and the effect on lens design calculations	26-Oct-20
11	24-Jun-19	1393853	Lens	E.D.Tillyer	Equalized Obligue Prism	18-Oct-21
12	8-Jul-19	1442015	Gun Sight	E.D.Tillyer	Binocular Gun Sight	9-Jan-23
13	8-Jul-19	1474803	Test lens	E.D.Tillyer	Improved method of constructing test lens for Neutralizing Lens power	20-Nov-23
14	17-Jul-19	1454774	Eye Testing Instrument	E.D.Tillyer	Eye chart instrument design for reduced target distance from 20-30 feet	8-May-23
15	5-Sep-19	1455457	Trial Lens	E.D.Tillyer	Additive Power Lens sets	15-May-23
16	4-Dec-19	1434268	Illuminating and Projecting Aparatus	E.D.Tillyer	Screen in projector to reduce heat	31-Oct-22
17	27-Dec-19	1526944	Lens	E.D.Tillyer	Heat sagging of lenses to produce deep curve or meniscus lens	17-Feb-25
18	23-Aug-20	1395311	Lens Attachment	E.D.Tillyer	Securing device for attaching lens to rimless frames	1-Nov-21
19	25-Sep-20	1383678	Lens Testing Instrument	E.D.Tillyer/C.M.Kerr	The Lensometer!!!	5-Jul-21
20	15-Dec-20	1426513	Ophthalmic Lens	E.D.Tillyer/C.Sheard	Pupil diameter calc/use caused redesign of Bifocal optical centers for improved image jump	22-Aug-22
21	10-Jan-21	1436217	Process of making multifocal lenses	E.D.Tillyer	Improved bifocal mfg process	21-Nov-22
22	22-Apr-21	1471368	Ophthalmic Lens	E.D.Tillyer/H.K.Parsons	Reduced prism jump by starting mfg of RP before DP	23-Oct-1923
23	31-May-21	1556550	Lens Testing Instrument	E.D.Tillyer	The Jr. Lensometer	6-Oct-25
24	27-Dec-21	1566050	Neutralizing Set	E.D.Tillyer	Method to keep additive lenses a fixed distance apart	15-Dec-25
25	6-Feb-22	1460148	Transposition Scale	E.D.Tillyer	3 disc display permitting easy translation from + to cyl	6-Feb-22
26	22-Feb-22	1544612	Ophthalmic Lens	E.D.Tillyer	Moved axis in reading zone	7-Jul-25
27	10-Apr-22	1494648	Lens Measure	E.D.Tillyer	Improved lens watch hand held gauge	20-May-24
28	10-Apr-22	1542112	Lens Testing Instrument	E.D.Tillyer	Bigger Lensometer	16-Jul-25
29	14-Apr-22	1449343	Process of making two part lenses	E.D.Tillyer/H.R.Moulton	Process to elimtate blue tinge from Sodium vapors in glassmaking	20-Mar-23

Doc Tillyer listing of his 157 AO Patents / inventions from Tim Tillyer Book				Dick Whitney	Updated 28-June-11		
	Date of Application	Final Patent Number	Title of Patent	Names	Summary	Date of Final Issue	
	30	17-Apr-22	1520617	Lens	E.D.Tillyer/A.E.Glancy	Toric Countersink Bifocal for improved process to aid in correction for Astig and Myopia, hyperopia	23-Dec-24
	31	18-Apr-22	1513813	Lens Grinding Apparatus	E.D.Tillyer/ K.V.Hill	Thermostatic control of coolant water	4_nov-1924
	32	18-Apr-22	1515630	Lens	E.D.Tillyer/ H.H.Styll	Monocentric fused bifocal	18-Nov-24
Mar	33	5-May-22	1557631	Ophthalmic Lens	E.D.Tillyer	Breath Mark Glass with Phosphoric Acid	20-Oct-25
Impa	34	13-May-22	1454200	Antaeus Glass	E.D.Tillyer / J.C.Wells	Annealing of Glass goggles for strengthening	8-May-23
Reta	35	2-Aug-22	1554308	Ophthalmic Lens	E.D.Tillyer	Factory Produced buttons and Lenses to distribute to retailer to make their own bifocals	22-Sep-25
Proc	36	2-Aug-22	1566051	Process of making lenses	E.D.Tillyer/ H.W.Hill	Tiny holes in lenses used to control grinding of finished lens thickness	15-Dec-25
	37	16-Oct-22	1608725	Lens Testing equipment	E.D.Tillyer/ B.P.Currier	Improvement to Lensometer target and Light source	30-Nov-26
Med	38	7-May-23	1659965	Ear Trumpet	E.D.Tillyer	Hearing Aid improvement, Dr. Glancy was his guinea pig as she was severely hearing impaired	21-Feb-26
	39	12-May-23	1659176	Picture projecting film	E.D.Tillyer	Improved film developing to help with fire problems during projection	14-Feb-28
	40	19-May-23	1671912	Lens Measure	E.D.Tillyer/N.M.Baker	Improved mechanism	29-May-28
	41	5-Nov-23	1664953	Diagnositic Instr. For throwing beam of light into the eye	E.D.Tillyer	Improved Retinoscope	3-Apr-28
	42	31-Mar-24	1672566	Lens Measure Instrument	E.D.Tillyer/A.E.Glancy	Improved heads on depth Gauges	5-Jun-28
	43	28-May-24	1588559	Ophthalmic Lens	E.D.Tillyer	"The Tillyer Lens"- Minimal marginal errors	15-Jun-26
	44	7-Aug-24	1607580	Lens	E.D.Tillyer	Same as 1593199 Filed in 1925	16-Nov-26
	45	29-Oct-24	1641790	Multifocal lens	E.D.Tillyer	Trifocal with RP on Concave side	1-Jun-26
	46	29-Oct-24	1700656	Automatically Operated Screen for Projection Apparatus	E.D.Tillyer	Automatic heat shield screen when film slowed or stopped	29-Jan-29
	47	6-Nov-24	1593196	Ophthalmic Lens	E.D.Tillyer	Toric DP to offset RP Astig	20-Jul-26
	48	3-Dec-24	1639012	Surfacing Machine	E.D.Tillyer	Improved grinding accuracy for either concave or convex surfaces	31-May-27
	49	30-Mar-25	1630724	Apparatus and Process for producing ophthalmic lenses	E.D.Tillyer	Improved process to create toric curves via sagging one meridian	31-May-27
	50	6-Jul-25	1563806	Ophthalmic Lens	E.D.Tillyer	Sagged curve in one meridian	1-Dec-25
	51	26-Aug-25	1644798	Ophthalmic Lens	E.D.Tillyer	Stannous Chloride and Stannous Oxide to improve lens ID marks invisible after washing	11-Oct-27
	52	12-Oct-25	1630281	Eye Testing Cabinet	E.D.Tillyer	Cabinet with new charts and lighting	31-May-27
	53	21-Nov-25	1593199	Lens	E.D.Tillyer	Fused bifocal button in countersink the toric curve in bifocal	20-Jul-26
	54	1-Feb-26	1671911	Schematic Eye	E.D.Tillyer	Model eye including viscous inner material for students	1-Feb-26
	55	1-Feb-26	1587131	Ophthalmic Lens	E.D.Tillyer	Goggle type mounting frame for temporary holding of lenses	1-Jun-26
	56	12-Apr-26	1659966	Bifocal Lens	E.D.Tillyer	Bifocal with Toric corrections in Distance and near	21-Feb-28
	57	8-Nov-26	1873675	Diagnostic Instrument	E.D.Tillyer	Adjustable sight socket to optimize filament light illumination in retinascope	23-Aug-32
	58	8-Nov-26	1721194	Ophthalmic Lens	E.D.Tillyer	Transparent lens retention rings to better hold beveled lenses in frame in proper position without slippage	16-Jul-11
	59	9-Mar-27	1697030	Ophthalmic Lens (Goggles)	E.D.Tillyer	Prismatic correction for wrap!!! Goggle lenses of plastic!	1-Jan-29

Doc Tillyer listing of his 157 AO Patents / inventions from Tim Tillyer Book				Dick Whitney	Updated 28-June-11	
	Date of Application	Final Patent Number	Title of Patent	Names	Summary	Date of Final Issue
60	2-Jun-27	1794571	Trial Frame	E.D.Tillyer/W.J.Wrighton	<i>Trial frame to fit lenses at fix distance and orientations to accurately measure and refract for vertex distacnes in effective power</i>	3-Mar-31
61	20-Jun-27	1722602	Goggles	E.D.Tillyer/E.L.Godfrey	Safety Goggles with Vent System to filter out chemical splashes	20-Jun-27
62	5-Jul-27	1686113	Goggles	E.D.Tillyer	Avaiatot goggles with wind vents to alleviate fogging	2-Oct-28
63	31-Oct-27	1887049	Device for Testing the eye	E.D.Tillyer/ E.A.Forshey/I.S.Nott	The Phoroptor (Measures Rx in eye)	8-Nov-32
64	5-Jan-28	1889456	Diagnostic Instrument	E.D.Tillyer	Improved image,. Lighting, for retinoscope	29-Nov-32
65	8-Mar-28	1866734	Ophthalmic Lens	E.D.Tillyer	Trifocal with narrowere RP for improved image jump	8-Mar-28
66	2-Apr-28	1797254	Process of plating	E.D.Tillyer	Improved metal plating process	24-Mar-31
67	2-May-28	1806318	Diagnostic Instrument	E.D.Tillyer	Improved eye safety of ophthalmoscope, better illumination	19-May-31
68	15-May-28	1873676	Ophthalmic Lens	E.D.Tillyer	Trifocal to view obstacle near feet when walking	15-May-28
69	15-May-28	1910483	Lens	E.D.Tillyer	Another Trifocal Design	23-May-33
70	25-Mar-29	1859756	Eye examining Instrument	E.D.Tillyer	Improved Retinoscope	24-May-32
71	1-Aug-29	1809534	Glass Treatment	E.D.Tillyer/H.R.Moulton	Annealing conveyor process for Glass hardening/stabilization	9-Jun-31
72	18-Sep-29	1865714	Ophthalmic Lens	E.D.Tillyer	Prescription lens in goggles	5-Jul-32
73	25-Oct-29	1865715	Ophthalmic Lens	E.D.Tillyer	UV absorbing pink crown glass	5-Jul-32
74	25-Oct-29	1942850	Eye Testing Device	E.D.Tillyer	Perimeter Field of View device	5-Jul-32
75	4-Nov-29	1880029	Ophthalmic Lens	E.D.Tillyer	Glass bifocal with Crown major and flint segment to improve seg line	27-Sep-32
76	16-Nov-29	1925576	Eye Testing Instrument and method	E.D.Tillyer	Color mapping fields and testing	5-Sep-33
77	16-Nov-29	1973966	Eye Testing Device	E.D.Tillyer	Color deficiency testing using illumation/contrast to improve results	18-Sep-34
78	13-Jan-30	1853710	Eye Testing Instruments	E.D.Tillyer	Binocular Fixation testing device	12-Apr-32
79	21-Jan-30	1813213	Eye Protector	E.D.Tillyer	Ventilation system improvements to goggles	7-Jul-31
80	25-Jan-30	1879833	Eye Testing Device	E.D.Tillyer / H.Pond	Letters Rounded in eye chart instead of squared corners for optical considerations	27-Sep-32
81	1-Feb-30	1854724	Eye Testing Instrument	E.D.Tillyer	Simplified, economical and compact Field of View device	19-Apr-32
82	17-Mar-30	1838781	Glass Treatment	E.D.Tillyer	Sandwiched Glass using metal loop for improving annealing process	29-Dec-31
83	29-Mar-30	1936736	Eye Protector	E.D.Tillyer/ E.A. Teason	Flap added to air vent system in Goggles for ventilation	28-Nov-33
84	26-Jun-30	1840064	Radio Telephony Receiving Apparatus	E.D.Tillyer	Radio receivng reducing wide band interference	5-Jan-32
85	9-Jul-30	1836735	Crystal Oscillator	E.D.Tillyer	Vaccum tube to stabilize Crystal used in radios	15-Dec-31
86	4-Aug-30	1949848	Radio Reciever	E.D.Tillyer	Battery powered booster to help with signal fade	6-Mar-34
87	17-Oct-30	1925577	Oscillating Crystal	E.D.Tillyer	Improperly cut short crystals salvaged for use in low frequency applications	5-Sep-33
88	12-Dec-30	2048304	Ophthalmic Lens	E.D.Tillyer	Improved bifocal process for improving bifocal ledge	21-Jun-36
89	24-Dec-30	1911154	Ophthalmic Lens	E.D.Tillyer	Improved bifocal process using protrusion in seg later used in positioning of lens	23-May-33
90	2-Feb-31	1910576	Sound Reproduction	E.D.Tillyer	Process for sound from film markings, utlimately adopted by RCA	23-May-33
91	13-Feb-31	1910577	Sound Reproduction	E.D.Tillyer	Mechanism for focus light slit used to read sound signal encoded on film	23-May-33

Doc Tillyer listing of his 157 AO Patents / inventions from Tim Tillyer Book				Dick Whitney	Updated 28-June-11		
	Date of Application	Final Patent Number	Title of Patent	Names	Summary	Date of Final Issue	
	92	27-Feb-31	1910578	Sound Reproduction	E.D.Tillyer	Improved sound production from film via bar streak method - RCA assigned patent	23-May-33
	93	4-Jun-31	1977813	Instrument	E.D.Tillyer	Lens to compensate for dispersion in eye for retinoscope	23-Oct-34
	94	30-Jul-32	1948636	Lens	E.D.Tillyer	Improved method to produce a bitoric lens	27-Feb-34
	95	27-Mar-32	1952394	Lens	E.D.Tillyer	Isekonic lens for size magification imbalance	27-Mar-34
	96	15-Sep-32	1952395	Screw Setting Device	E.D.Tillyer/ E.L.Schumaker (later Pres of AO)	Screwdriver which widened screw after connecting frame, keeping screw from falling out	27-Ma-1934
	97	31-Dec-32	2023907	Ophthalmic Lens	E.D.Tillyer	Isekonic lens improvments	10-Dec-35
	98	23-Jan-33	2024552	Ophthalmic Lens	E.D.Tillyer	Fusing 2 corrective lenses to produce a finished 1 lens	17-Dec-35
	99	19-Jun-33	1957116	Ophthalmic Lens	E.D.Tillyer	Crown glass composition cheaper and less color, more white appearance	1-May-34
	100	13-Oct-33	2033101	Ophthalmic Lens	E.D.Tillyer/H.R.Moulton	Lens edge seal and bevel	3-Mar-36
	101	28-Oct-33	1957117	Ophthalmic Lens	E.D.Tillyer	Different Crown Glass Compositions for fused bifocals to improve quality and reduce cost	1-May-34
	102	16-Dec-33	2042565	Methods of aligning and Holding Lens Elements	E.D.Tillyer	Vacuum from Water used to help hold compound lenses during their alignment	2-Jun-36
	103	5-Mar-34	2049095	Ophthalmic Lens	E.D.Tillyer	Improvement oo Bifocal fusing method via Abrasion tool and process	28-Jul-36
	104	10-Mar-34	2049094	Method of Making Ophthalmic Lenses	E.D.Tillyer	Lower temperature fusing method of Bifocal to permit fusing on site at distribution point	28-Jul-36
Telev	105	13-Apr-34	2127015	Electromagnetic Wave Signaling System	E.D.Tillyer	TV Broadcast system to send signal larger distances via booster stations!!!	16-Aug-38
	106	14-Apr-34	2077134	Ophthalmic Lens	E.D.Tillyer	New formula to compute Isekonic lens RX in conjunction with specified SF Blanks for ease of fabrication in the field	14-Apr-34
	107	13-Sep-34	2092789	Glass Treatment	E.D.Tillyer	Cement and lens curvatures to permit boding of two glass wafers with optically clear transmission	14-Sep-37
	108	12-Jul-35	2087270	Ophthalmic Lens	E.D.Tillyer	Flint and Barium Crown glass used to reduce thickness and chromatic aberrations in Cataract Lenses	20-Jul-37
	109	29-Jul-35	2107553	Ophthalmic Instrument	E.D.Tillyer	Lensometer attachment for correction in reading power	8-Feb-38
	110	7-Dec-35	2125056	Ophthalmic Lens	E.D.Tillyer	Isekonic corections for distance and near	26-Jul-38
	111	8-May-36	2129889	Lens Testing Instrument	E.D.Tillyer	Measurment system for shape and size magnification	13-Sep-38
	112	21-Mar-37	2187105	Ophthalmic Lens and Process of making the same	E.D.Tillyer	Improved process for blanks to be supplied to dispensers in a series of Magnifications with one side clear and for RX corrections at the local level.	16-Jan-40
	113	31-Mar-37	2180887	Ophthalmic Lens and Process of making the same	E.D.Tillyer	Series of Mag steps for Opticians to use to make corrective lenses / charts and calc methods provided	21-Nov-39
	114	12-Apr-37	2191047	Method and means of testing the Eye	E.D.Tillyer	Means of testing Mag imbalance using 1 set of size test lenses instead of 2	20-Feb-40
	115	1-Nov-37	2214802	Ophthalmic Lens	E.D.Tillyer	Improvments to Bifocals and optical corrcctions	1-Oct-40
	116	22-Nov-11	2214802	Polarizing Retinoscope	E.D.Tillyer	Three layer reflector to achieve polarization in Retinoscope	17-Sep-40

Doc Tillyer listing of his 157 AO Patents / inventions from Tim Tillyer Book				Dick Whitney	Updated 28-June-11	
Date of Application	Final Patent Number	Title of Patent	Names	Summary	Date of Final Issue	
117	8-Dec-37	2211086	Contact lens and method of making the same	E.D.Tillyer	Creation of orange peel like surface on portion of contact lens on the sclera, improving eye fluid flow and aiding in comfort	13-Aug-40
118	20-Jan-38	2304217	Method and apparatus for making lenses	E.D.Tillyer	Injection molding design of mold which could withstand high pressures	2304217
119	7-Apr-38	2232233	Ophthalmic Lens	E.D.Tillyer/H.W.Hill	One piece bifocal process improvement	18-Feb-41
120	24-Jun-38	2224168	Abrading Device	E.D.Tillyer/H.R.Moulton	A method to hold and abrade plastic (polymeric methyl methacrylate using Bees wax and other materials	10-Dec-40
121	21-Jul-38	2209587	Ophthalmic Lens	E.D.Tillyer	"A lens formed of a single piece of lens medium may be provided with any desired focal power and magnification corrections"	30-Jul-40
122	22-Oct-38	2267961	Means of Testing Lenses	E.D.Tillyer	"Doc designed an automatic system whereby a beam of light was sent through a spirally cut slit on a rotating disk onto the lens. The light beam went through the the entire lens as it wound through the spiral on the rotating disk. The light then continued through the lens onto a light sensitive instrument. The light would remain constant unless it hit a flaw in the lens be examined at which time the light intensity would vary. This variation would cause an alert to sound and notify the inspector of the flaw.	13-Jan-42
123	24-Dec-38	2269494	Heat retarding device and method for making same	E.D.Tillyer	Infra red filter system for Projectors to reduce heat on film	13-Jan-42
124	12-May-39	2279084	Heat screen for projection apparatus	E.D.Tillyer	Heat screen by projection lamp	7-Apr-42
125	12-May-39	2278501	Glass composition and product thereof	E.D.Tillyer/H.R.Moulton/M.Gunn	Glass resistant to hydrofluoric acid	
126	26-May-39	2254633	Glass composition and product thereof	E.D.Tillyer/H.R.Moulton/M.Gunn	Glass stable to weathering, high index and abbe	26-May-39
127	1-Aug-39	2288216	Means of Recording Eye movements	E.D.Tillyer	Means to record eye movements on movie film; device called the "Ophthalm-O-Graph"	30-Jun-42
128	21-Dec-39	2291663	Ophthalmic Lens	E.D.Tillyer	Plastic lens whose index is similar to glass, an advantage when selling to Labs	4-Aug-42
129	9-Apr-40	2280322	Ophthalmic Lens	E.D.Tillyer	Bifocal with reduce image jump	21-Apr-42
130	10-May-40	2226418	Glass composition	E.D.Tillyer/H.R.Moulton/T.M.Gunn	Renewal of patent 15-May-1936	24-Dec-40
131	13-Sep-40	2370697	Optical Means	E.D.Tillyer	Means to sandwich polaroid lens to prevent bleaching	6-Mar-45
132	24-Feb-41	2380481	Ophthalmic Mounting	E.D.Tillyer/W.J.Joyce/H.R.Moulton	Polarized Variable density goggle filtering system	31-Jul-45
133	2-Jan-42	2361514	Means and methods of Manufacturing prisms	E.D.Tillyer/C.G.Silverberg/D.P.Bernheim	Improved process to make 90 prisms	31-Oct-44
134	30-Jun-42	2369189	Glass Annealing and Method	E.D.Tillyer/J.W.Ford	Means for test sample for batch to determine proper anneal for that batch, specific index	30-Jun-42
135	1-Aug-42	2418489	Glass Annealing	E.D.Tillyer	Glass rod sample for annealing control	8-Apr-47
136	12-Sep-42	2391045	Ophthalmic Lens	E.D.Tillyer	Correction of error in patent 1588559 for variation in Center of Rotation distances for myopes and hyperopes	18-Dec-45
137	19-Aug-43	2404770	Optical scanning device and process of making articles therewith	E.D.Tillyer/A.H.Bennett	Pantograph type projection system to replicate from Master	30-Jun-46
138	11-Dec-43	2423128	Glass Composition and method of making same	E.D.Tillyer	Glass with transmitted UV - hot house application	1-Jul-47
139	6-Nov-44	2466119	Reflection Modifying coating and articles so coated and method of making the same	E.D.Tillyer/H.R.Moulton	AR Coating method	5-Apr-49

Doc Tillyer listing of his 157 AO Patents / inventions from Tim Tillyer Book				Dick Whitney	Updated 28-June-11	
	Date of Application	Final Patent Number	Title of Patent	Names	Summary	Date of Final Issue
140	15-Feb-45	2482698	Optical lens having non-spherical refracting surface	E.D.Tillyer	Improved Schmidt Aspheric Lens via slumping using AO Green block mtl	20-Sep-49
141	20-Feb-46	2518099	Lenticular Cataract Lens	E.D.Tillyer	Cataract design for thinner lenses via lentic which also used UV absorbing Glass	8-Aug-50
142	21-Nov-46	2524719	Glass Composition	E.D.Tillyer	Rosesmoke UV- IR Absorbing lens	8-Aug-50
143	4-Feb-47	2552125	Welding Glasses and Process of forming Aberration Corrector Member for image forming optical Objectives	E.D.Tillyer	1942 filing for Glass blower welders	8-May-51
144	27-Jun-47	2596799	Surface Reflection modifying Solutions	E.D.Tillyer/H.B.Kenmore	Green block camera lens to add aspheric optical corrections	13-May-52
145	27-Sep-48	2584905	Thickness gage for lenses	E.D.Tillyer/H.R.Moulton	Expanded formulation of 1944 patent, where this mixture could be applied to windows, charts, etc to reduce reflections	5-Feb-52
146	16-Dec-48	2646627	Variable Light modifying Device for phase contrast	E.D.Tillyer/ J.R.Eves	Thickness gage with swivel contact to measure off center of lens	28-Jul-53
147	29-Jul-49	2666362	Laminated Structures	E.D.Tillyer	Device for phase contrast microscopy	19-Jan-54
148	8-Jun-50	2727843	Method of Producing light refracting optical elements having Aspherically Curved optical elements	E.D.Tillyer	Improved bonding method for laminating lenses	20-Dec-55
149	25-Sep-51	2685821	Integrating devices	E.D.Tillyer/ H.R.Bennett	Green block process improvements for slumping aspherics	10-Aug-54
150	23-Oct-51	2756928	Apparatus and methods of production of Helium by diffusion	E.D.Tillyer/R.D.Hudson	A counter and recorder for processing numeric information in graph	31-Jul-56
151	25-Sep-59	3022858		E.D.Tillyer	This invention was for an apparatus that seperated helium of high commerical quality from natural gas or volatile oil refinery gas	27-Feb-62
152				E.D.Tillyer		
153				E.D.Tillyer		
154				E.D.Tillyer		
155				E.D.Tillyer		
				E.D.Tillyer		