

NATIONAL AIR AND SPACE ARCHIVES

Curtiss-Wright Corporation Archives – Patent Files

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Historical Note

The years before World War I were spent in patent litigation for aviation pioneers Glenn Curtiss and Orville and Wilbur Wright. The Wright brothers claimed wing warping patents and sought to prevent Curtiss and others from manufacturing and selling aircraft and products based on these patents. During World War I, the aircraft manufacturing industry set up the Manufacturer's Aircraft Association, a patent pool in which all participants were allowed to use any patents to build aircraft for the war effort. After the war, Wright Aeronautical Corporation and the Curtiss Aeroplane and Motor Company continued to be major players in the aircraft industry, long after Curtiss and the Wrights ended association with their namesakes.

In 1929, the Curtiss Aeroplane and Motor Company merged with the Wright Aeronautical Corporation to form the Curtiss-Wright Corporation. After the merger, responsibility for engine and propeller manufacture was consolidated under the Wright name while Curtiss concentrated on airplanes. Although the two companies were merged by name and under the direction of a corporate headquarters located in New York City, the separation and specialization of the two divisions continued to cause problems for the company. The election of former Wright personnel to key corporate positions soon led to Wright becoming the dominant division. The Great Depression and the collapse of the market for commercial aviation revealed how reliant the aviation industry was on military production. Sales dropped and Curtiss-Wright was forced to close certain satellite plants and transfer some of their product lines to the St. Louis facility.

During the U.S. military build-up prior to World War II, existing Curtiss-Wright plants were expanded and new aircraft factories were built to meet the growing production demand. The company failed, however, to plan for the future after the war. In 1946, Curtiss-Wright had only two experimental military models at hand for postwar delivery and no assurance of production orders. Wright Aeronautical continued to build engines, but was no longer at the forefront of development. The eventual sale of the Airplane Division to North American included design rights to the former Curtiss-Wright airplanes. The Curtiss-Wright Airplane Division, which manufactured airframes, finally closed down in 1951.

The Curtiss-Wright Corporation still exists in the 21st century, but has become a diversified technology corporation in various markets, including aviation and defense.

Scope and Content Note

The Curtiss-Wright Corporation Archives – Patent Files collection consists primarily of materials relating to patents issued to and maintained by the Curtiss-Wright Corporation and its subsidiaries from the 1910s to the 1950s, though the bulk of the materials pre-date World War II. The majority of the collection is original patent certificates. Other materials include records of litigation proceedings, correspondence, memoranda, aircraft drawings and blueprints, reports, sales brochures, meeting minutes, and annual reports.

The collection is arranged in four series: Patents, Patent File Wrappers, Patent Litigation, and Curtiss-Wright Corporation Records. Series I contains original patents and related materials issued or assigned to the Curtiss-Wright Corporation and related organizations. Covering the years between 1911 and 1939, the series is further divided into two subseries: United States Patents and International Patents. Series II consists of file wrappers prepared by the United States Patent Office, containing a complete record of the patent's history. The third series includes materials from Curtiss-Wright's numerous litigation proceedings in defense of its patents. The fourth series contains business records created by the Curtiss-Wright Corporation including photocopies of historic patent and stock documents, division minutes, and reports for the U.S. Navy Department.

Series I – Patents, 1911-1939

 Subseries I – United States Patents, 1911-1939

 Subseries II – International Patents, 1916-1935

Series II – Patent File Wrappers, 1916-1930

Series III – Patent Litigation, 1916-1947

Series IV – Curtiss-Wright Corporation Records, 1906-1945

Researchers may wish to consult other collections in the NASM Archives:

Curtiss-Wright Corporation Records, Acc. XXXX-0067. This collection includes reports and technical reports from various Curtiss-Wright divisions, legal documents, corporate and financial records, drawings and blueprints. There are additional patent certificates and related materials.

Clement Melville Keys Papers, Acc. XXXX- 0091. Clement Melville Keys (1876-1952) was a financier and corporate organizer who headed the Curtiss group of companies during the merger that formed Curtiss-Wright.

CONTAINER LIST

Series I – Patents, 1911-1939

According to the United States Patent and Trademark Office, a patent is an exclusive right granted by a government to an inventor to manufacture, use, or sell an invention for a certain number of years. This series consists of patents issued to inventors associated with or with rights assigned to the Curtiss-Wright Corporation and related organizations. The series is divided into two subseries: United States Patents, 1911-1939, and International Patents, 1916-1935.

Subseries I – United States Patents, 1911-1939

This subseries consists of patents issued by the United States government. There are two types of US patents, a design patent and a utility patent. A design patent refers to the visual ornamental characteristics embodied in, or applied to, an article of manufacture. A utility patent protects useful processes, machines, articles of manufacture, and compositions of matter.¹ Materials in the series consist of the actual certificates issued, official reprints by the Government Printing Office, and related materials. Patent certificates issued before May 1922 hold the original signature of the Commissioner of Patents. After this time, all patent certificates were rubber-stamped. Materials are organized by patent number; the first five patents are design patents and the rest of the patents are utility patents.

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1	1	Design Patent No. 50585, Samuel T. Payne and John P. Tarbox, Nameplate, 4/10/1917
	2	Design Patent No. 50714, Nelson W. Dalton, Aeroplane body, 5/8/1917
	3	Design Patent No. 52847, Charles G. MacGregor and Henry Kleckler, Hydroaeroplane pontoon, 1/7/1919
	4	Design Patent No. 53882, William Starling Burgess, Hydroaeroplane pontoon, 10/7/1919
	5	Design Patent No. 55504, Glenn H. Curtiss, Aeroplane, 6/22/1920
	6	Patent No. 1010842, Frederick W. Baldwin, Flying machines, 12/5/1911
	7	Patent No. 1027242, Glenn H. Curtiss, Means for launching flying machines, 5/21/1912
	8	Patent No. 1085575, Glenn H. Curtiss, Control mechanism for flying machines and the like, 1/27/1914
	9	Patent No. 1104036, Glenn H. Curtiss, Flying machines, 7/21/1914
	10	Patent No. 1108490, Glenn H. Curtiss, Flying machines, 8/25/1914
	11	Patent No. 1156215, Glenn H. Curtiss, Heavier than air flying machines, 10/12/1915
	12	Patent No. 1170965, Glenn H. Curtiss, Hydroaeroplanes, 2/8/1916
	13	Patent No. 1195142, Henry Kleckler, Fuselage for aeroplanes, 8/15/1916

¹ United States Patent and Trademark Office, "Patents Guidance, Tools & Manuals," <http://www.uspto.gov/patents/resources/types/index.jsp>, accessed August 8, 2010.

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1	14	Patent No. 1197746, Henry Kleckler, Hydroplane wing pontoons, 9/12/1916	
	15	Patent No. 1204380, Glenn H. Curtiss, Flying machines, 11/7/1916	
	16	Patent No. 1210373, Glenn H. Curtiss, Exhaust heaters for air inlets, 12/26/1916	
	17	Patent No. 1210374, Glenn H. Curtiss, Hulls for flying boats, 12/26/1916	
	18	Patent No. 1210379, Henry Kleckler, Aileron systems, 12/26/1916	
	19	Patent No. 1223298, John P. Tarbox, Spoke stays, 4/17/1917	
	20	Patent No. 1223315, Glenn H. Curtiss, Landing gears for aircraft, 4/17/1917	
	21	Patent No. 1223316, Glenn H. Curtiss, Multiple control systems for prime movers, 4/17/1917	
	22	Patent No. 1223317, Glenn H. Curtiss, Folding wing aeroplanes, 4/17/1917	
	23	Patent No. 1223318, Glenn H. Curtiss, Boat hulls, 4/17/1917	
	24	Patent No. 1223319, Glenn H. Curtiss, Flying boat hulls, 4/17/1917	
	25	Patent No. 1223320, Glenn H. Curtiss and John P. Tarbox, Multiple step flying boats, 4/17/1917	
	26	Patent No. 1223321, Glenn H. Curtiss, Propellers, 4/17/1917	
	27	Patent No. 1228375, John P. Tarbox and Henry Kleckler, Universal wing post sockets, 5/29/1917	
	28	Patent No. 1228380, Glenn H. Curtiss, Methods and systems for operating rudders of aircraft, 5/29/1917	
	29	Patent No. 1228381, Glenn H. Curtiss, Hydroaero machines, 5/29/1917	
	30	Patent No. 1228382, Glenn H. Curtiss, Flying machines, 5/29/1917	
	31	Patent No. 1246010, William Starling Burgess, Inherently stable flying boats, 11/6/1917	
	32	Patent No. 1246011, Glenn H. Curtiss, Flying boats, 11/6/1917	
	33	Patent No. 1246012, Glenn H. Curtiss, Flying boats, 11/6/1917	
	34	Patent No. 1246013, Glenn H. Curtiss and Henry Kleckler, Balancing systems for aircraft, 11/6/1917	
	35	Patent No. 1246014, Glenn H. Curtiss, Hydroplane boats, 11/6/1917	
	36	Patent No. 1246015, Glenn H. Curtiss, Aeroplanes, 11/6/1917	
	37	Patent No. 1246016, Glenn H. Curtiss, Flying boats, 11/6/1917	
	38	Patent No. 1246017, Glenn H. Curtiss, Boat type wing pontoons, 11/6/1917	
	39	Patent No. 1246018, Glenn H. Curtiss, Draft systems for flying boats, 11/6/1917	
	40	Patent No. 1246019, Glenn H. Curtiss, Flying boat hulls, 11/6/1917	
	41	Patent No. 1246020, Glenn H. Curtiss, Landing gear for aircraft, 11/6/1917	
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	43	Patent No. 1246022, Nelson W. Dalton, Aeroplane motor supports, 11/6/1917	
	44	Patent No. 1246023, Charles B. Kirkham, Aerial propeller fastenings, 11/6/1917	
	2	1	Patent No. 1246024, Henry Kleckler, Aeroplane furniture, 11/6/1917
		2	Patent No. 1246025, Henry Kleckler, Dual interlocking controls, 11/6/1917
		3	Patent No. 1246026, Henry Kleckler, Tail skid clips, 11/6/1917
		4	Patent No. 1246027, Henry Kleckler, Aeroplane control surfaces, 11/6/1917
		5	Patent No. 1246028, Henry Kleckler, Aeroplane wing hinges, 11/6/1917

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2	6	Patent No. 1246029, Albert F. Zahm, Processes of solidifying and toughening the hub portion of aerial propellers and the like, 11/6/1917
	7	Patent No. 1256878, Glenn H. Curtiss, Hydroaeroplane boats, 2/19/1918
	8	Patent No. 1269397, Glenn H. Curtiss, Hydroaeroplane pontoons, 6/11/1918
	9	Patent No. 1269570, Glenn H. Curtiss, Convertible running gear, 6/11/1918
	10	Patent No. 1271386, John P. Tarbox, Assembly forms for aeroplane wings, 7/2/1918
	11	Patent No. 1280760, Charles B. Kirkham, Internal combustion engines, 10/8/1918
	12	Patent No. 1283529, Henry Kleckler, Fan pumps, 11/5/1918
	13	Patent No. 1283684, Glenn H. Curtiss, Flying boat cruisers, 11/5/1918
	14	Patent No. 1283803, Charles B. Kirkham, Crank case main bearings, 11/5/1918
	15	Patent No. 1284250, Glenn H. Curtiss, Valve operating systems, 11/12/1918
	16	Patent No. 1284906, Henry Kleckler, Hydro landing bases for aircraft, 11/12/1918
	17	Patent No. 1284907, Henry Kleckler, Landing gear for aircraft, 11/12/1918
	18	Patent No. 1285021, William Starling Burgess, Aeroplane wing construction, 11/19/1918
	19	Patent No. 1285229, Henry Kleckler and Charles G. MacGregor, Flying boat hulls, 11/19/1918
	20	Patent No. 1285230, Henry Kleckler and Charles G. MacGregor, Hydroaeroplane pontoons, 11/19/1918
	21	Patent No. 1286345, Charles B. Kirkham, Lubricating systems, 12/3/1918
	22	Patent No. 1287249, Glenn H. Curtiss, Tilting wing flying boats, 12/10/1918
	23	Patent No. 1237339, Charles B. Kirkham, Thrust bearings for aeronautical motors, 12/10/1918
	24	Patent No. 1297341, Henry Kleckler, Handling trucks for flying boats, 12/10/1918
	25	Patent No. 1289683, Glenn H. Curtiss, Flying boats, 12/31/1918
	26	Patent No. 1290000, Albert F. Zahm, Calculators, 12/31/1918
	27	Patent No. 1290004, Paul G. Zimmermann, Aeroplane fittings, 12/31/1918
	28	Patent No. 1290005, Paul G. Zimmermann, Fuselage covers, 12/31/1918
	29	Patent No. 1290102, Nelson W. Dalton, Landing gear construction, 1/7/1919
	30	Patent No. 1290235, Henry Kleckler, Triplanes, 1/7/1919
	31	Patent No. 1290236, Henry Kleckler, Tail skids for aeroplanes, 1/7/1919
	32	Patent No. 1290237, Henry Kleckler, Engine bed mountings, 1/7/1919
	33	Patent No. 1290838, Henry Kleckler, Aeroplane construction, 1/7/1919
	34	Patent No. 1291678, Henry Kleckler, Wing construction, 1/14/1919
	35	Patent No. 1294389, Henry Kleckler, Hydroaero machines, 2/18/1919
	36	Patent No. 1294412, Glenn H. Curtiss, Twin fuselage construction, 2/18/1919
	37	Patent No. 1294413, Glenn H. Curtiss, Autoplanes, 2/18/1919
	38	Patent No. 1294414, Glenn H. Curtiss and William L. Gilmore, Hulls for flying boats, 2/18/1919
	39	Patent No. 1294415, Glenn H. Curtiss and William L. Gilmore, Flying boats, 2/18/1919
	40	Patent No. 1294474, Charles B. Kirkham, Motor cooling system, 2/18/1919

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	43	Patent No. 1294477, Henry Kleckler, Tail skids for aeroplanes, 2/18/1919
3	1	Patent No. 1295084, Glenn H. Curtiss, Aeroplane construction, 2/18/1919
	2	Patent No. 1296630, Glenn H. Curtiss, Hydroaircraft, 3/11/1919
	3	Patent No. 1296667, Henry Kleckler, Wing post sockets, 3/11/1919
	4	Patent No. 1296730, Paul G. Zimmermann and Henry Kleckler, Pusher hydroaeroplanes, 3/11/1919
	5	Patent No. 1296770, Glenn H. Curtiss, Airplane landing gears, 3/11/1919
	6	Patent No. 1296773, Nelson W. Dalton, Convertible control systems, 3/11/1919
	7	Patent No. 1296774, Nelson W. Dalton, Magneto cut-off switches, 3/11/1919
	8	Patent No. 1296775, Nelson W. Dalton, Aerofoil construction, 3/11/1919
	9	Patent No. 1296790, William L. Gilmore and William E. Valk, Jr., Radiators for aeroplanes, 3/11/1919
	10	Patent No. 1296876, John P. Tarbox, Skid structures for hydroaircraft, 3/11/1919
	11	Patent No. 1298515, Henry Kleckler, Fuselage clips, 3/25/1919
	12	Patent No. 1298516, Henry Kleckler, Aeroplane control bridges, 3/25/1919
	13	Patent No. 1298625, Paul G. Zimmermann, Landing gear for aeroplanes, 3/25/1919
	14	Patent No. 1306749, Glenn H. Curtiss, Twin-float hydroaeroplanes, 6/17/1919
	15	Patent No. 1306750, Glenn H. Curtiss, Aeroplane wing trusses, 6/17/1919
	16	Patent No. 1306751, Glenn H. Curtiss, Combination landing gears for aeroplanes, 6/17/1919
	17	Patent No. 1306764, Henry Kleckler, Aeroplane wing hinges, 6/17/1919
	18	Patent No. 1306765, Henry Kleckler, Landing gears for aircraft, 6/17/1919
	19	Patent No. 1310737, William Starling Burgess, Reconnoitering hydro airplanes, 7/22/1919
	20	Patent No. 1310764, William G. Mesner, Airplane wire fastenings, 7/22/1919
	21	Patent No. 1310913, Clarence A. Kirkham, Motor cylinders, 7/22/1919
	22	Patent No. 1310942, Nelson W. Dalton, Airplane wing construction, 7/22/1919
	23	Patent No. 1311129, Henry Kleckler, Control systems, 7/22/1919
	24	Patent No. 1316244, Thomas Seth Kemble, Magneto testing apparatus, 9/16/1919
	25	Patent No. 1316257, Harry B. Snell, Wire bending machines, 9/16/1919
	26	Patent No. 1316260, Albert F. Zahm, Vibration measures, 9/16/1919
	27	Patent No. 1316277, Glenn H. Curtiss, Cruising hydroaeroplanes, 9/16/1919
	28	Patent No. 1316278, Glenn H. Curtiss, Triplane speed scouts, 9/16/1919
	29	Patent No. 1316279, Glenn H. Curtiss, Speed scout aeroplanes, 9/16/1919
	30	Patent No. 1316280, Glenn H. Curtiss, Folding wing airplanes, 9/16/1919
	31	Patent No. 1316281, Nelson W. Dalton, Propeller thrust registers for aircraft, 9/16/1919
	32	Patent No. 1316908, Charles Gordon MacGregor, Flying boat hulls, 9/23/1919

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3	33	Patent No. 1323842, Glenn H. Curtiss, Reconnoitering aeroplanes, 12/2/1919
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	35	Patent No. 1323959, William Starling Burgess, Pusher triplanes, 12/2/1919
	36	Patent No. 1326008, John P. Tarbox, Turnbuckles, 12/23/1919
	37	Patent No. 1326010, Albert F. Zahm, Ailerons of variable aspect ratio, 12/23/1919
	38	Patent No. 1326405, Charles B. Kirkham, Air heaters for aeronautical motors, 12/30/1919
	39	Patent No. 1329038, Glenn H. Curtiss, Lubricating systems for traveling motors, 1/27/1920
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	41	Patent No. 1329342, Henry Kleckler, Aeroplane constructions, 1/27/1920
	42	Patent No. 1336405, Henry Kleckler, Airplanes, 4/6/1920
4	1	Patent No. 1336406, John P. Tarbox, Convertible multiplanes, 4/6/1920
	2	Patent No. 1336632, Henry Kleckler, Aeroplane control mechanism, 4/13/1920
	3	Patent No. 1336633, Henry Kleckler, Landing gears for aircraft, 4/13/1920
	4	Patent No. 1336634, Henry Kleckler, Flying boats, 4/13/1920
	5	Patent No. 1336649, Edward T. Musson, Wire wrapping and winding machines, 4/13/1920
	6	Patent No. 1336704, Charles B. Kirkham, Aeronautical motors, 4/13/1920
	7	Patent No. 1338310, Charles L. Lawrance, Lubricating systems for high-speed engines, 4/27/1920
	8	Patent No. 1349676, Charles B. Kirkham, Lubrication of internal combustion engines, 8/17/1920
	9	Patent No. 1349677, Henry Kleckler, Strut fittings, 8/17/1920
	10	Patent No. 1351742, Glenn H. Curtiss and Henry Kleckler, Flying boat construction, 9/7/1920
	11	Patent No. 1351743, Glenn H. Curtiss, Airplane wing structure trusses, 9/7/1920
	12	Patent No. 1351763, Charles B. Kirkham, Aeronautical motors, 9/7/1920
	13	Patent No. 1351764, Henry Kleckler, Hoisting connections for airplanes, 9/7/1920
14	Patent No. 1355736, Glenn H. Curtiss, Hydro-aircraft, 10/12/1920	
15	Patent No. 1355738, Nelson W. Dalton, Aeroplane-wing structures, 10/12/1920	
16	Patent No. 1355741, William L. Gilmore and Joseph F. Meade, Airplane fuselages, 10/12/1920	
17	Patent No. 1355767, Joseph F. Meade and Everett Vail Church, Airplane fittings, 10/12/1920	
18	Patent No. 1357950, William Starling Burgess, Airplane control surface operating braces, 11/9/1920	
19	Patent No. 1357992, Thomas S. Kemble, Exhaust mufflers, 11/9/1920	
20	Patent No. 1358527, Glenn H. Curtiss, Tripod flying boats, 11/9/1920	
21	Patent No. 1358603, Albert F. Zahm, Hovering aeroplanes, 11/9/1920	
22	Patent No. 1358605, Paul G. Zimmermann, Fuselage wiring, 11/9/1920	
23	Patent No. 1363793, Charles B. Kirkham, Lubricating pumps, 12/28/1920	

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4	24	Patent No. 1363794, Charles B. Kirkham and Arthur L. Thurston, Control mechanism, 12/28/1920	
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	26	Patent No. 1363845, Glenn H. Curtiss and William L. Gilmore, Hydro-aero machines, 12/28/1920	
	27	Patent No. 1363847, Nelson W. Dalton, Aeroplanes, 12/28/1920	
	28	Patent No. 1364425, Clayton Emmett Bedell, Flying boat hulls, 1/4/1921	
	29	Patent No. 1364431, Carl E. Freund, Airplane wing structures, 1/4/1921	
	30	Patent No. 1364614, Glenn H. Curtiss, Airplane wing construction, 1/4/1921	
	31	Patent No. 1368428, William L. Gilmore, Airplane fuselages, 2/15/1921	
	32	Patent No. 1368439, Thomas Seth Kemble, Exhaust valve springs, 2/15/1921	
	33	Patent No. 1368542, William Starling Burgess, Longitudinal control systems for aircraft, 2/15/1921	
	34	Patent No. 1368548, Glenn H. Curtiss, Aileron braking systems, 2/15/1921	
	35	Patent No. 1368549, Glenn H. Curtiss, Airplane construction, 2/15/1921	
	36	Patent No. 1368550, Glenn H. Curtiss, Triplanes, 2/15/1921	
	37	Patent No. 1370692, Charles B. Kirkham, Aeronautical motors, 3/8/1921	
	38	Patent No. 1370693, Henry Kleckler, Airplane landing gears, 3/8/1921	
	39	Patent No. 1373408, William Starling Burgess, Pontoon mountings for hydroaeroplanes, 4/5/1921	
	40	Patent No. 1373432, Charles B. Kirkham, Valve operating mechanism, 4/5/1921	
	41	Patent No. 1373433, Henry Kleckler, Control columns, 4/5/1921	
	42	Patent No. 1382387, Clayton L. Roloson, Engine bed supports, 6/21/1921	
	43	Patent No. 1382421, William L. Gilmore and Joseph F. Meade, Hydroairplane landing gears, 6/21/1921	
	44	Patent No. 1386787, Charles B. Kirkham, Pumps, 8/9/1921	
	45	Patent No. 1386841, Joseph G. Coffin, Methods and apparatus for making aerofoils and the like, 8/9/1921	
	46	Patent No. 1386846, Glenn H. Curtiss and Henry Kleckler, Fuel supply systems for aircraft and similar apparatus, 8/9/1921	
	47	Patent No. 1392271, Glenn H. Curtiss, Streamline wiring for airplanes, 12:00:00 AM	
	48	Patent No. 1392272, Glenn H. Curtiss, Airplane landing gears, 12:00:00 AM	
	49	Patent No. 1392276, Charles B. Kirkham, Reduction gearings, 9/27/1921	
	5	1	Patent No. 1392277, Charles B. Kirkham and Arthur L. Thurston, Airplane landing gears, 9/27/1921
		2	Patent No. 1392278, Charles B. Kirkham and Arthur L. Thurston, Fuselages, 9/27/1921
		3	Patent No. 1392279, Henry Kleckler, Flying boat hulls, 9/27/1921
		4	Patent No. 1394630, Grover C. Loening, Airplanes, 10/25/1921
		5	Patent No. 1394726, William L. Gilmore, Airplane fuselage, 10/25/1921
		6	Patent No. 1398194, Charles L. Lawrance, Big end construction for radial motors, 11/22/1921
		7	Patent No. 1398315, Ernest Hallowell Cawthra, Fuel supply and regulating systems for aircraft engines, 11/29/1921
		8	Patent No. 1398330, Charles B. Kirkham, Radiators for airplanes, 11/29/1921

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5	9	Patent No. 1401934, Albert F. Zahm, Hovering airplanes, 12/27/1921
	10	Patent No. 1404617, Charles L. Lawrance, Big end constructions for motors, 1/24/1922
	11	Patent No. 1404618, Charles L. Lawrance, Big end constructions for motors, 1/24/1922
	12	Patent No. 1404861, Charles B. Kirkham, Lubricating devices for internal combustion engines, 1/31/1922
	13	Patent No. 1404920, Albert F. Zahm, Wind tunnel balances, 1/31/1922
	14	Patent No. 1405176, Albert F. Zahm, Propeller thrust and torque measures, 1/31/1922
	15	Patent No. 1405177, Albert F. Zahm, Systems for testing propellers, 1/31/1922
	16	Patent No. 1406575, Joseph F. Meade, Landing gears for aircraft, 2/14/1922
	17	Patent No. 1406600, Albert F. Zahm, Propeller hub construction, 2/14/1922
	18	Patent No. 1406617, Nelson W. Dalton, Controls for aircraft, 2/14/1922
	19	Patent No. 1418131, Glenn H. Curtiss, Motive power systems for aircraft, 5/30/1922
	20	Patent No. 1420609, Glenn H. Curtiss, Hydroaeroplanes, 6/20/1922
	21	Patent No. 1420610, Glenn H. Curtiss, Method of getting hydroaeroplanes off the water into the air, 6/20/1922
	22	Patent No. 1423334, Charles B. Kirkham, Magneto gearing, 7/18/1922
	23	Patent No. 1423681, George B. Post, Airplanes, 7/25/1922
	24	Patent No. 1430640, William L. Gilmore, Airplanes, 10/3/1922
	25	Patent No. 1432817, Joseph Wertzheiser, Lubricating systems for high speed engines, 10/24/1922
	26	Patent No. 1434547, Charles B. Kirkham and Arthur L. Thurston, Airplanes, 11/7/1922
	27	Patent No. 1434559, Edward T. Musson, Wing jigs, 11/7/1922
	28	Patent No. 1435139, Harvey C. Mummert, Retractable landing gears for aircraft, 11/7/1922
	29	Patent No. 1437465, John A. Christen, Airplane fittings, 12/5/1922
	30	Patent No. 1437466, Nelson W. Dalton, Automatic safety devices for aeronautical motors, 12/5/1922
	31	Patent No. 1437469, William L. Gilmore and Theodore P. Wright, Aeroplane wing structures, 12/5/1922
	32	Patent No. 1437471, Charles B. Kirkham, Propeller hub fastenings, 12/5/1922
	33	Patent No. 1437861, Finley R. Porter, Fuel supply systems, 12/5/1922
	34	Patent No. 1439798, Henry M. Crane, Compression relief devices for internal combustion engines, 12/26/1922
	35	Patent No. 1445135, William L. Gilmore, Fighting aeroplanes, 2/13/1923
	36	Patent No. 1445142, Charles B. Kirkham, Propeller mountings, 2/13/1923
	37	Patent No. 1447788, Charles B. Kirkham, Lubricating devices for internal combustion engines, 3/6/1923
	38	Patent No. 1454505, John A. Christen, Multiple control systems for multimotored aircraft, 5/8/1923
	39	Patent No. 1463171, George J. Meade, Valve operating mechanism, 7/31/1923

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5	40	Patent No. 1463556, Sylvanus Albert Reed, Aeronautical propellers, 7/31/1923	
	41	Patent No. 1465973, Glenn H. Curtiss, Triplane flying boats, 8/28/1923	
	42	Patent No. 1465989, Charles B. Kirkham, Aeronautical motors, 8/28/1923	
	43	Patent No. 1466634, John P. Tarbox, Wing shedding means for flying boats, 8/28/1923	
	44	Patent No. 1479993, Charles B. Kirkham, Motive power systems for aircraft, 1/8/1924	
	45	Patent No. 1481986, Joseph G. Coffin, Methods and apparatus for measuring altitudes, 1/29/1924	
	46	Patent No. 1485783, Grandison Gardner, Vertical stabilizer, 3/4/1924	
	47	Patent No. 1386607, Rudolph R. Reissig, Tanks and methods of making, 3/11/1924	
	48	Patent No. 1494787, Henry Kleckler and Glenn H. Curtiss, Tail skids for aeroplanes, 5/20/1924	
	49	Patent No. 1509251, Harvey C. Mummert, Wing radiator fastenings, 9/23/1924	
	50	Patent No. 1511666, William L. Gilmore, Twin fuselage monoplanes, 10/14/1924	
	51	Patent No. 1511667, William L. Gilmore, Cooling systems for the power plants of aircraft, 10/14/1924	
	52	Patent No. 1511672, Charles B. Kirkham, Internal combustion engines, 10/14/1924	
	6	1	Patent No. 1511689, John P. Tarbox, Combination land air and water craft, 10/14/1924
		2	Patent No. 1511691, William E. Valk, Jr., Airplane radiators, 10/14/1924
		3	Patent No. 1513053, Charles A. Lewis, Aircraft landing gear, 10/28/1924
		4	Patent No. 1518410, Sylvanus Albert Reed, Aeronautical propellers, 12/9/1924
		5	Patent No. 1531704, John P. Langfelder, Flotation bodies for hydroaircraft, 3/31/1925
		6	Patent No. 1535526, William L. Gilmore, Aeroplane wings, 4/28/1925
		7	Patent No. 1535532, John P. Langfelder, Aeroplanes, 4/28/1925
8		Patent No. 1539273, Sylvanus A. Reed, Propellers, 5/26/1925	
9		Patent No. 1542412, Sylvanus A. Reed, Aeronautical propellers, 6/16/1925	
10		Patent No. 1543479, Arthur Nutt, Starters for internal combustion engines, 6/23/1925	
11		Patent No. 1543651, Harvey C. Mummert, Wing strut fastenings for aeroplanes, 6/23/1925	
12		Patent No. 1545505, Grover C. Loening, Airplanes, 7/14/1925	
13		Patent No. 1545684, Arthur Nutt and Adolph Moses, Internal combustion motors, 7/14/1925	
14		Patent No. 1555409, William L. Gilmore, Airplane wings, 9/29/1925	
15		Patent No. 1556348, William A. Ray and Rex B. Beisel, Aeroplane landing gears, 10/6/1925	
16		Patent No. 1563384, Grover C. Loening, Retractable landing gears, 12/1/1925	

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6	17	Patent No. 1565096, Harvey C. Mummert and William Wait, Jr., Methods of constructing radiators for use in connection with internal combustion motors, 12/8/1925
	18	Patent No. 1565097, Harvey C. Mummert, Differential aileron controls, 12/8/1925
	19	Patent No. 1565100, Arthur Nutt and Adolph Moses, Automatic throttle controls, 12/8/1925
	20	Patent No. 1568578, Walter L. Weeks, Reverse gear and clutch operating mechanism, 1/5/1926
	21	Patent No. 1569245, Andrew V.D. Willgoos, Internal combustion engines, 1/12/1926
	22	Patent No. 1575328, William L. Gilmore and Harvey C. Mummert, Aeroplane landing gears, 3/2/1926
	23	Patent No. 1575359, Arthur Nutt, Lubricating systems for aeronautical motors, 3/2/1926
	24	Patent No. 1584053, William Wait, Jr., Engine bed mountings, 5/11/1926
	25	Patent No. 1584466, Harvey C. Mummert and William L. Gilmore, Airplane landing gears, 5/11/1926
	26	Patent No. 1590699, Sylvanus A. Reed, Aeronautical propellers, 6/29/1926
	27	Patent No. 1598738, George J. Meade and Charles F. Taylor, Oil radiators, 9/7/1926
	28	Patent No. 1604757, Sylvanus A. Reed, Aeronautical propellers, 10/26/1926
	29	Patent No. 1604758, Sylvanus A. Reed, Aeronautical propellers, 10/26/1926
	30	Patent No. 1613602, Thomas H. Birmingham, Aerofoils, 1/11/1927
	31	Patent No. 1613619, Harvey C. Mummert and Joseph F. Meade, Aeroplane radiators, 1/11/1927
	32	Patent No. 1617433, Rex B. Beisel, Oil temperature regulators, 2/15/1927
	33	Patent No. 1617816, Grover C. Loening, Amphibian airplanes, 2/15/1927
	34	Patent No. 1621326, Charles L. Lawrance, Internal combustion engines, 3/15/1927
	35	Patent No. 1623128, Harvey C. Mummert, Temperature regulating systems for liquid cooled aeronautical motors, 4/5/1927
	36	Patent No. 1631259, William L. Gilmore, Variable lift--variable resistance airfoils, 6/7/1927
	37	Patent No. 1632526, Andrew V.D. Willgoos, Clutches, 6/14/1927
	38	Patent No. 1632913, Arthur Nutt, Propeller mountings, 6/21/1927
	39	Patent No. 1635009, Sylvanus Albert Reed, Twisting machines, 7/5/1927
	40	Patent No. 1639029, William L. Gilmore, Aeroplanes, 8/16/1927
	41	Patent No. 1642278, Nathan F. Vanderlipp, Fasteners, 9/13/1927
	42	Patent No. 1650464, Sylvanus A. Reed, Aeronautical propellers, 11/22/1927
	43	Patent No. 1650665, Arthur L. Thurston, Airplane radiators, 11/29/1927
	44	Patent No. 1651152, Sylvanus Albert Reed, Aeronautical propellers, 11/29/1927
	45	Patent No. 1653122, William A. Ray, Aeroplane landing gears, 12/20/1927
	46	Patent No. 1666761, William Wait, Jr., Combination seat and control mechanism for aircraft, 4/17/1928
	47	Patent No. 1666769, Rex B. Beisel and William L. Gilmore, Airplanes, 4/17/1928

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6	48	Patent No. 1672341, Sylvanus A. Reed, Aeronautical propellers, 6/5/1928
	49	Patent No. 1673564, Charles E. Hathorn and Sylvanus A. Reed, Propeller twisting presses, 6/12/1928
	50	Patent No. 1673608, William Wait, Jr., Wheel chocks for aeroplanes, 6/12/1928
	51	Patent No. 1681219, Harold Caminez, Engine mounting, 8/21/1928
	52	Patent No. 1682202, Stanley I. Vaughn, Beams, 8/28/1928
	53	Patent No. 1682204, William Wait, Jr., Aeroplane radiators, 8/28/1928
	54	Patent No. 1682229, Temple N. Joyce, Adjustable windshields, 8/28/1928
7	55	Patent No. 1684187, Grover C. Loening, Constructions for airplane floats, 9/11/1928
	1	Patent No. 1687636, Sylvanus A. Reed, Aeronautical propellers, 10/16/1928
	2	Patent No. 1692010, William Wait, Jr., Retractable landing gears, 11/20/1928
	3	Patent No. 1694496, Theodore P. Wright and William Wait, Jr., Rudder operating mechanism for aircraft, 12/11/1928
	4	Patent No. 1704713, Arthur R. Stalb, Jr., Pontoon attaching means, 3/12/1929
	5	Patent No. 1705708, Rex B. Beisel, Metal trusses, 3/19/1929
	6	Patent No. 1707830, William Wait, Jr., Exhaust mufflers for radial cylinder engines for aircraft, 4/2/1929
	7	Patent No. 1708373, Frederick R. Weymouth, Control surface operating mechanism, 4/9/1929
	8	Patent No. 1711637, Sherman Mills Fairchild, Control surface operating mechanism, 5/7/1929
	9	Patent No. 1714804, Harvey C. Mummert, Radiators for aeroplanes, 5/28/1929
	10	Patent No. 1714806, Arthur Nutt, Valve operating mechanism, 5/28/1929
	11	Patent No. 1714807, Arthur Nutt, Valve operating mechanism, 5/28/1929
	12	Patent No. 1714842, Rex B. Beisel, Radiator shutters, 5/28/1929
	13	Patent No. 1718956, Knut Henrichsen, Aeroplane landing gears, 7/2/1929
	14	Patent No. 1722467, Thomas H. Huff, Dusting apparatus, 7/30/1929
	15	Patent No. 1722821, Arthur Nutt, Valve operating mechanism, 7/30/1929
	16	Patent No. 1723012, Harold Caminez, Aircraft engine mount, 8/6/1929
	17	Patent No. 1723175, Edward T. Jones, Master connecting rods for radial cylinder engines, 8/6/1929
	18	Patent No. 1723962, Frederick R. Weymouth, Folding wing, 8/6/1929
	19	Patent No. 1724959, George A. Page, Jr., and Frank H. Russell, Wire end seals for aircraft, 8/20/1929
	20	Patent No. 1731492, Louis Haase, Pontoon nose buffer, 10/15/1929
	21	Patent No. 1731531, Edgar N. Gott, Aircraft, 10/15/1929
	22	Patent No. 1735852, Elliot Daland, Landing gears for airplanes, 11/19/1929
	23	Patent No. 1737122, Arthur Nutt, Motor cooling systems, 11/26/1929
	24	Patent No. 1737123, George A. Page, Jr., Dump valves for fluid containers, 11/26/1929
	25	Patent No. 1739690, Arthur Nutt, Oiling systems, 12/17/1929
26	Patent No. 1743173, William O. Warner, Cam-shaft driving mechanism for internal combustion engines, 1/14/1930	

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7	27	Patent No. 1745126, Arthur Ralston Stalb, Jr., Detachable ski, 1/28/1930
	28	Patent No. 1749769, Corydon Milton Johnson, Airplane wing construction, 3/11/1930
	29	Patent No. 1759197, Grover Loening, Retractable landing gears, 5/20/1930
	30	Patent No. 1759442, Richard Henry DePew, Jr., Control surface operating mechanism, 5/20/1930
	31	Patent No. 1770276, Charles D. Koch, Refrigerators for moving vehicles, 7/8/1930
	32	Patent No. 1770756, Roscoe I. Markey, Tail skid, 7/15/1930
	33	Patent No. 1771743, Arthur G. Butler and George A. Page, Emergency dump valves, 7/29/1930
	34	Patent No. 1772889, Sherman Mills Fairchild, Wing landing light, 8/12/1930
	35	Patent No. 1773399, Arthur H. Leak, Crank case construction, 8/19/1930
	36	Patent No. 1778113, Grover Loening, Seaplanes or amphibians, 10/14/1930
	37	Patent No. 1778340, Sylvanus A. Reed, Aeronautical propellers, 10/14/1930
	38	Patent No. 1781883, Sylvanus A. Reed, Aeronautical propellers, 11/18/1930
	39	Patent No. 1785339, Elliot Daland, Shock absorbers for landing gears of airplanes, 12/16/1930
	40	Patent No. 1789483, William Wait, Jr., Operating mechanism for aircraft control surfaces, 1/20/1931
	41	Patent No. 1792489, William L. Gilmore, Joint fittings, 2/17/1931
	42	Patent No. 1792537, William J. Irvine, Cowl fasteners, 2/17/1931
	43	Patent No. 1793494, John G. Lee, Folding wing aeroplane, 2/24/1931
	44	Patent No. 1799555, Leroy R. Grumman, Flying boats and like craft, 4/7/1931
	45	Patent No. 1803995, Roland Chilton, Splined connections, 5/5/1931
	46	Patent No. 1804433, Sylvanus Albert Reed, Aeronautical propellers, 5/12/1931
	47	Patent No. 1804434, Sylvanus A. Reed, Aeronautical propellers and methods of making the same, 5/12/1931
	48	Patent No. 1814315, Charles D. Koch, Refrigerators for vehicles, 7/14/1931
	49	Patent No. 1817956, William Wait, Jr., Aeroplane wings, 8/11/1931
	50	Patent No. 1818000, Howard R. Moles, Aerofoil operating mechanism, 8/11/1931
	51	Patent No. 1823883, Maitland B. Bleecker, Indicators for internal combustion engines, 9/22/1931
	52	Patent No. 1825301, Rex B. Beisel, Aeroplanes, 9/29/1931
	53	Patent No. 1831365, Sylvanus A. Reed, Aeronautical propellers and methods of making same, 11/10/1931
	54	Patent No. 1831366, Sylvanus A. Reed, Tandem aeronautical propellers, 11/10/1931
	55	Patent No. 1831394, Sylvanus A. Reed, Aeronautical propellers, 11/10/1931
	56	Patent No. 1832275, Rex B. Beisel, Aeronautical propellers, 11/17/1931
	57	Patent No. 1832320, Arthur Nutt, Crank case oil seal, 11/17/1931
	58	Patent No. 1833635, Ralph D. Carlton and Hubert F. Franklin, Control surface operating mechanism for aircraft, 11/24/1931
	59	Patent No. 1833646, Charles E. Hathorn, Emergency flotation gears for aircraft, 11/24/1931

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7	60	Patent No. 1833911, Sylvanus A. Reed, Aeronautical propellers, 12/1/1931
8	1	Patent No. 1836989, Sylvanus A. Reed, Aeronautical propellers and methods of making the same, 12/15/1931
	2	Patent No. 1842765, Sylvanus A. Reed, Adjustable pitch propellers, 1/26/1932
	3	Patent No. 1842766, Sylvanus A. Reed, Aeronautical propellers, 1/26/1932
	4	Patent No. 1846609, Sylvanus A. Reed, Attachment means for aeronautical propellers, 2/23/1932
	5	Patent No. 1850964, Rex B. Beisel, Aeroplane landing gears, 3/22/1932
	6	Patent No. 1855020, Knut Henrichsen, Aircraft tail chassis, 4/19/1932
	7	Patent No. 1855589, Sylvanus A. Reed, Aeronautical propellers, 4/26/1932
	8	Patent No. 1856080, Robert R. Osborn, Aeroplane wing structures, 5/3/1932
	9	Patent No. 1858393, Richard Henry DePew, Jr., Airplane wheel brake operating means, 5/17/1932
	10	Patent No. 1860813, Arthur Nutt, Lubrication systems for inverted motors, 5/31/1932
	11	Patent No. 1860814, Arthur Nutt, Internal combustion engines, 5/31/1932
	12	Patent No. 1860851, Roland Chilton, Yielding clutches, 5/31/1932
	13	Patent No. 1869182, Werner J. Blanchard, Propellers, 7/26/1932
	14	Patent No. 1869211, Robert R. Osborn, Airfoil operating mechanism, 7/26/1932
	15	Patent No. 1874332, Edmund B. Moore, Variable pitch propellers, 8/30/1932
	16	Patent No. 1874406, Theodore P. Wright, Exhaust silencers, 8/30/1932
	17	Patent No. 1874422, Rex B. Beisel, Gun mounts, 8/30/1932
	18	Patent No. 1874444, Carl Gustaf Carvelli, Oiling systems, 8/30/1932
	19	Patent No. 1874446, Roland Chilton, Ported cylinder construction, 8/30/1932
	20	Patent No. 1874493, Charles G. Geigetter, Duel control brakes, 8/30/1932
	21	Patent No. 1874522, Knut Henrichsen, Curved control sticks, 8/30/1932
	22	Patent No. 1874523, Knut Henrichsen, Aircraft cowling for tandem motors, 8/30/1932
	23	Patent No. 1874605, George A. Page, Jr., Oil tanks, 8/30/1932
	24	Patent No. 1874610, Samuel T. Payne, Fuselage construction, 8/30/1932
	25	Patent No. 1874650, Colby W. Steward, Aeroplane landing gears, 8/30/1932
	26	Patent No. 1874685, Theodore P. Wright, Ribless wings, 8/30/1932
	27	Patent No. 1882305, Max Stupar and George A. Payne, Clamps, 10/11/1932
	28	Patent No. 1886708, Roscoe I. Markey, Fastening device for airplane wing covers, 11/8/1932
	29	Patent No. 1888807, Elmer James Rivers, Machine for shaping metal tubes, 11/22/1932
	30	Patent No. 1890820, Roscoe I. Markey, Airplane, 12/13/1932
	31	Patent No. 1892064, Roscoe I. Markey, Aeroplane landing ski, 12/27/1932
	32	Patent No. 1892065, Roscoe I. Markey, Aeroplane engine mount, 12/27/1932
	33	Patent No. 1892070, Roy G. Miller, Sound absorbing monocoque fuselage, 12/27/1932
	34	Patent No. 1892914, Clem G. Trimbach, Machine gun mounts for aircraft, 1/3/1933
	35	Patent No. 1892915, Arne F. Vinje, Aircraft control surface adjusting mechanisms, 1/3/1933

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8	36	Patent No. 1892916, Arne F. Vinje, Aircraft controls, 1/3/1933
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	38	Patent No. 1894582, George W. De Bell, Retractable landing gear, 1/17/1933
	39	Patent No. 1895222, Corydon M. Johnson, Airplane safety belt, 1/24/1933
	40	Patent No. 1896222, Roland Chilton, Engine cowlings, 2/7/1933
	41	Patent No. 1896234, Charles E. Hathorn, Tail wheels, 2/7/1933
	42	Patent No. 1896270, Theodore P. Wright, Airplanes, 2/7/1933
	43	Patent No. 1902071, Charles E. Hathorn, Stabilizer adjusting mechanism, 3/21/1933
	44	Patent No. 1902094, George A. Page, Jr., Rudder pedal adjusting mechanism, 3/21/1933
	45	Patent No. 1902096, Fred A. A. Pearson, Propellers, 3/21/1933
	46	Patent No. 1902107, Clem G. Trimbach, Machine gun mounts for aircraft, 3/21/1933
	47	Patent No. 1902111, Stanley Irving Vaughn, Metal joints and methods of forming the same, 3/21/1933
	48	Patent No. 1902421, Herbert Rawdon and Walter E. Burnham, Shock absorbers, 3/21/1933
	49	Patent No. 1905891, Werner J. Blanchard, Aeronautical propellers, 4/25/1933
	50	Patent No. 1906404, George A. Page, Jr., Apparatus for cooling internal combustion engines, 5/2/1933
9	1	Patent No. 1908726, Rex B. Beisel and George A. Page, Jr., Aeroplane shutters, 5/16/1933
	2	Patent No. 1908757, Charles E. Hathorn, Aeronautical trusses and methods of forming the same, 5/16/1933
	3	Patent No. 1908814, Werner J. Blanchard, Propeller mountings, 5/16/1933
	4	Patent No. 1908820, Roland Chilton, Engine cowlings, 5/16/1933
	5	Patent No. 1910591, Roland Chilton, Air cooled engine cylinders, 5/23/1933
	6	Patent No. 1914092, Knut Henrichsen and Samuel T. Payne, Retractable landing gears, 6/13/1933
	7	Patent No. 1917078, Theodore P. Wright and Robert R. Osborn, Landing gears for aircraft, 7/4/1933
	8	Patent No. 1922063, Stanley I. Vaughn, Monocoque bodies, 8/15/1933
	9	Patent No. 1923384, Roy G. Miller, Airplane fuel tank, 8/22/1933
	10	Patent No. 1925271, Roy G. Miller, Composite floor construction, 9/5/1933
	11	Patent No. 1926329, Roland Chilton, Pistons, 9/12/1933
	12	Patent No. 1926349, Arthur Nutt, Arthur H. Leak, and Harry L. Chisholm, Jr., Valve operating mechanism, 9/12/1933
	13	Patent No. 1933966, Roland Chilton, Engine cowlings, 11/7/1933
	14	Patent No. 1933998, Samuel T. Payne, Oil coolers, 11/7/1933
	15	Patent No. 1934399, Maitland B. Blecker, Methods and apparatus for cooling internal combustion engines, 11/7/1933
	16	Patent No. 1939047, William F. Gerhardt and Clarence A. Brock, Aerodynamic instructions and testing apparatus, 12/12/1933
	17	Patent No. 1939051, Charles E. Hathorn, Sliding windshields, 12/12/1933
	18	Patent No. 1941348, Charles E. Hathorn, Joint fittings, 12/26/1933

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9	19	Patent No. 1942391, Roy G. Miller, Airplane wing spars, 1/2/1934
	20	Patent No. 1943233, Myron G. Beard, Heating and ventilating systems, 1/9/1934
	21	Patent No. 1944219, Roland Chilton, Flange connections, 1/23/1934
	22	Patent No. 1947982, William F. Gerhardt and Clarence A. Brock, Amusement apparatus, 2/20/1934
	23	Patent No. 1947987, Charles E. Hathorn, Combined exhaust manifolds and mufflers, 2/20/1934
	24	Patent No. 1950970, Roland Chilton, Two cycle engines, 3/13/1934
	25	Patent No. 1950971, Roland Chilton, Reduction gears, 3/13/1934
	26	Patent No. 1950995, Jules E. Piccard, Oleopneumatic struts, 3/13/1934
	27	Patent No. 1951320, Werner J. Blanchard, Variable pitch propellers, 3/13/1934
	28	Patent No. 1951321, Werner J. Blanchard, Blade retention devices, 3/13/1934
	29	Patent No. 1951783, Myron G. Beard, Instrument board lighting devices, 3/20/1934
	30	Patent No. 1951839, Elmer J. Rivers, Riveting devices, 3/20/1934
	31	Patent No. 1958229, Walter H. Beech, Safety meters, 5/8/1934
	32	Patent No. 1958261, William J. Blanchard, Indicators, 5/8/1934
	33	Patent No. 1958264, Roland Chilton, Valve gears, 5/8/1934
	34	Patent No. 1961584, Charles E. Hathorn, Frames for access opening for use in aircraft construction, 6/5/1934
	35	Patent No. 1962246, Arthur H. Leak, Multiple master connecting rod assemblies, 6/12/1934
	36	Patent No. 1966043, George A. Page, Jr. and George E. Warren, Cowling rings, 7/10/1934
	37	Patent No. 1968182, Clem G. Trimbach, Gun mounts, 7/31/1934
	38	Patent No. 1974802, Roland Chilton, Valve spring mechanism, 9/25/1934
	39	Patent No. 1974803, Roland Chilton, The venting of crank cases, 9/25/1934
	40	Patent No. 1974804, Roland Chilton, Crank case venting systems, 9/25/1934
	41	Patent No. 1976456, Edmund L. Noonan, Combined fuel valves and tank releases, 10/9/1934
	42	Patent No. 1976479, Arthur G. Butler, Bungee controls, 10/9/1934
	43	Patent No. 1976480, Ralph D. Carlton and Raymond C. Blaylock, Aerofoils, 10/9/1934
	44	Patent No. 1976482, Edward R. Child, Slot and flap combinations, 10/9/1934
	45	Patent No. 1976483, Roland Chilton, Compensated valve gears, 10/9/1934
	46	Patent No. 1979025, Gustaf Carvelli, Venting systems, 10/30/1934
	47	Patent No. 1980181, Karl Bodden, Automatic riveters, 11/13/1934
	48	Patent No. 1980185, Roland Chilton, Torsional vibration dampers, 11/13/1934
	49	Patent No. 1980195, William F. Gerhardt and Clarence A. Brock, Wind tunnel balances, 11/13/1934
	50	Patent No. 1980228, Frank D. Rogers, Welding tools, 11/13/1934
	51	Patent No. 1983358, Frank W. Fink, Aircraft landing gear holding devices, 12/4/1934

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9	52	Patent No. 1983368, Charles E. Hathorn, Sealing means for control rods, 12/4/1934
10	1	Patent No. 1983378, William D. Kennedy, Valve gear servicing devices, 12/4/1934
	2	Patent No. 1988079, Knut Henrichsen, Airplane wings, 1/15/1935
	3	Patent No. 1988085, Salvatore P. Orlando, Structural joints, 1/15/1935
	4	Patent No. 1988093, Colby W. Steward, Landing gears, 1/15/1935
	5	Patent No. 1988119, Henry C. Hill, Internal combustion engines, 1/15/1935
	6	Patent No. 1988148, Frederick R. Weymouth, Ailerons and flap combinations, 1/15/1935
	7	Patent No. 1990978, Edward R. Child, Irreversible controls, 2/12/1935
	8	Patent No. 1990979, Roland Chilton, Engine cooling means, 2/12/1935
	9	Patent No. 1990990, Charles E. Hathorn, Control levers and shafting, 2/12/1935
	10	Patent No. 1993875, Rudolph Daub, Valve gear operating mechanism, 3/12/1935
	11	Patent No. 1993893, George A. Page, Jr., Battery installations, 3/12/1935
	12	Patent No. 1995601, Kenneth A. Browne, Mixture ratio control for fuel injection pumps, 3/26/1935
	13	Patent No. 1997279, Roland Chilton, Piston driving mechanism, 4/9/1935
	14	Patent No. 1997285, Frederick R. Weymouth, Antiflutter devices, 4/9/1935
	15	Patent No. 1997298, Charles E. Hathorn, Mufflers, 4/9/1935
	16	Patent No. 2000666, Robert R. Osborn and Theodore P. Wright, Aircraft, 5/7/1935
	17	Patent No. 2000714, Arthur Nutt, Lubricating systems, 5/7/1935
	18	Patent No. 2000722, Colby W. Steward, Exhaust manifolds, 5/7/1935
	19	Patent No. 2002944, Charles E. Hathorn, Access openings for use in aircraft construction, 5/28/1935
	20	Patent No. 2008094, Milton A. Chester, Shock struts, 7/16/1935
	21	Patent No. 2010945, Ralph D. Carleton, Tail wheel fairings, 8/13/1935
	22	Patent No. 2014776, Robert R. Osborn, Wing construction, 9/17/1935
	23	Patent No. 2014777, Samuel T. Payne and Frederick R. Weymouth, Retractable landing gear, 9/17/1935
	24	Patent No. 2014791, Clem G. Trimbach, Adapters for twin flexible machine guns, 9/17/1935
	25	Patent No. 2014793, Frederick R. Weymouth and Frank A. Wedberg, Retractable landing gear, 9/17/1935
	26	Patent No. 2014801, Frederic Flader, Rib construction, 9/17/1935
	27	Patent No. 2017207, Charles E. Hathorn, Strut fairing brackets, 10/15/1935
	28	Patent No. 2018012, Roland Chilton, Spinner cowls, 10/22/1935
	29	Patent No. 2021129, Roland Chilton, Oil temperature regulators, 11/19/1935
	30	Patent No. 2021282, Werner J. Blanchard, Lubricating systems, 11/19/1935
	31	Patent No. 2021306, Charles E. Hathorn, Tail wheels, 11/19/1935
	32	Patent No. 2021307, Charles E. Hathorn, Retractable landing gear operating means, 11/19/1935
	33	Patent No. 2021324, Robert R. Osborn, Folding wing aeroplanes, 11/19/1935
	34	Patent No. 2021325, George A. Page, Jr., Wheel fairing, 11/19/1935
	35	Patent No. 2021326, Samuel T. Payne, Retractable landing gears, 11/19/1935

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10	36	Patent No. 2025735, Frederic E. Flader and Donald C. Rowe, Amphibian landing gears, 12/31/1935	
	37	Patent No. 2025743, Charles E. Hathorn, Retractable landing gear, 12/31/1935	
	38	Patent No. 2025744, Charles E. Hathorn, Methods and apparatus for electric spot welding, 12/31/1935	
	39	Patent No. 2026182, Arthur H. Leak, Supercharger fuel drains, 12/31/1935	
	40	Patent No. 2032682, Werner J. Blanchard, Crankcase vents, 3/3/1936	
	41	Patent No. 2032711, Howard R. Moles, Crash pads, 3/3/1936	
	42	Patent No. 2032718, Donald C. Rowe, Tail wheels, 3/3/1936	
	43	Patent No. 2034083, Arthur G. Butler, Landing gears, 3/17/1936	
	44	Patent No. 2034087, Roland Chilton, Two speed supercharger drives, 3/17/1936	
	45	Patent No. 2034095, Charles E. Hathorn, Hand grips and covers, 3/17/1936	
	46	Patent No. 2034106, Guy A. Luburg, Retractable landing gears, 3/17/1936	
	47	Patent No. 2034119, Herbert V. Shebat, Mufflers, 3/17/1936	
	48	Patent No. 2034121, Robert A. Swaim, Parking brakes, 3/17/1936	
	49	Patent No. 2035019, Robert R. Osborn, Cooling means, 3/24/1936	
	50	Patent No. 2035231, George F. Haberstro, Parking harness, 3/24/1936	
	51	Patent No. 2037384, Arthur H. Leak, Connecting rods, 4/14/1936	
	52	Patent No. 2040465, Roland Chilton, Connecting rods, 5/12/1936	
	53	Patent No. 2040496, Robert R. Osborn, Control mechanism for auxiliary wing flaps, 5/12/1936	
	54	Patent No. 2044338, Colby W. Steward, Retractable landing gears, 6/16/1936	
	11	1	Patent No. 2044340, Clem G. Trimbach, Gun installation and firing means, 6/16/1936
		2	Patent No. 2044357, John A. Kerr, Aileron control for folding wings, 6/16/1936
		3	Patent No. 2044368, Donald C. Rowe, Walter Tydon, and Fredric E. Flader, Differential screws, 6/16/1936
		4	Patent No. 2047341, Stanley I. Vaughn and Edwin H. Fabing, Methods of riveting, 7/14/1936
		5	Patent No. 2047392, Frederick I. Steele, Gear shift mechanism, 7/14/1936
		6	Patent No. 2049145, George E. Warren and George F. Haberstro, Jr., Control levers with switches, 7/28/1936
		7	Patent No. 2050240, Myron G. Beard, Heating and ventilating systems for aircraft, 8/11/1936
		8	Patent No. 2050741, Godfrey B. Speir, Wheel starters, 8/11/1936
		9	Patent No. 2050748, Rudolph Daub, Two cycle engines, 8/11/1936
		10	Patent No. 2053048, S.T. Robinson, Cover fastenings, 9/1/1936
		11	Patent No. 2053053, Robert A. Swaim, Aircraft landing gears, 9/1/1936
		12	Patent No. 2053064, Leonard O. Cederwall, Aileron controls, 9/1/1926
		13	Patent No. 2053078, Charles E. Hathorn, Engine mounts, 9/1/1926
		14	Patent No. 2053093, Guy A. Luburg, Amphibian landing gears, 9/1/1926
		15	Patent No. 2056999, Raymond C. Blaylock, Control mechanism, 10/13/1926
16	Patent No. 2057010, Roland Chilton, Baffles for air-cooled cylinders, 10/13/1926		

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11	17	Patent No. 2059687, Rudolph F. Gagg, Deicing throttles, 11/3/1936
	18	Patent No. 2059717, Clem G. Trimbach, Flexible adapters for machine guns, 11/3/1936
	19	Patent No. 2064461, Roland Chilton and Rudolph F. Gagg, Cylinder fin construction, 12/15/1936
	20	Patent No. 2064673, Guy A. Luburg, Collapsible turtlebacks, 12/15/1936
	21	Patent No. 2064674, Guy A. Luburg, Eddie Molloy, and Frederic E. Flader, Flexible flotation gears, 12/15/1936
	22	Patent No. 2064675, Guy A. Luburg, Amphibian landing gears, 12/15/1936
	23	Patent No. 2064729, Ralph D. Carleton, Bomb supports, 12/15/1936
	24	Patent No. 2066394, Rudolph Daub, Internal combustion engine structure, 1/5/1937
	25	Patent No. 2067585, Clem G. Trimbach, Gunners' seat and mountings, 1/12/1937
	26	Patent No. 2067595, Kenneth A. Browne, Willard B. Goodman, and Donald J. Lowman, Deicing means, 1/12/1937
	27	Patent No. 2067597, Roland Chilton, Cooling fins, 1/12/1937
	28	Patent No. 2069991, Werner J. Blanchard, Pitch indicators, 2/9/1937
	29	Patent No. 2069994, Arthur G. Butler, Folding landing gears, 2/9/1937
	30	Patent No. 2069996, Ralph D. Carleton and Clem G. Trimbach, Releasable tanks and bomb racks, 2/9/1937
	31	Patent No. 2070006, Bruce G. Eaton, Jr., and Harry A. Sutton, Wing spoilers, 2/9/1937
	32	Patent No. 2070009, Willard B. Goodman, Anterior throttle carburetors, 2/9/1937
	33	Patent No. 2071594, Clem G. Trimbach, Streamline mounts for miniature bombs, 2/23/1937
	34	Patent No. 2073325, Harry A. Sutton, Sliding hoods, 3/9/1937
	35	Patent No. 2073350, Robert R. Osborn, Wing trusses, 3/9/1937
	36	Patent No. 2073362, Arthur G. Butler, Richard E. Palmer, and Samuel T. Payne, Retractable landing gears, 3/9/1937
	37	Patent No. 2076224, Roland Chilton, Engine cowlings, 4/6/1937
	38	Patent No. 2076225, Roland Chilton, Engine cooling and cowling, 4/6/1937
	39	Patent No. 2076232, Willard B. Goodman and Wesley L. Losson, Engine cooling and cowling, 4/6/1937
	40	Patent No. 2076254, Herbert V. Shebat, Bearings, 4/6/1937
	41	Patent No. 2076256, Robert A. Swaim and Carl R.O.P. Heintze, Mounts for wing guns, 4/6/1937
	42	Patent No. 2076259, Theodore P. Wright, Antivibration vanes, 4/6/1937
	43	Patent No. 2089168, Perry W. Brown, Spline connections, 8/3/1937
	44	Patent No. 2089649, Charles E. Hathorn, Quick detachable clevises, 8/10/1937
	45	Patent No. 2090079, Clem G. Trimbach, Gun mounts, 8/17/1937
	46	Patent No. 2090775, Theodore P. Wright, Twisted fairings, 8/24/1937
	47	Patent No. 2092639, Roland Chilton, Gear means for eliminating a master connecting rod, 9/7/1937
	48	Patent No. 2092644, Frank Erny, Tension oleo struts, 9/7/1937

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11	49	Patent No. 2092655, George A. Page, Jr., Airplanes with sleeping accommodations, 9/7/1937
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12	1	Patent No. 2095739, Willard B. Goodman, Carburetors, 10/12/1937
	2	Patent No. 2095743, Charles E. Hathorn, Retractable landing gears, 10/12/1937
	3	Patent No. 2095757, William G. Lundquist and John E. Weiss, Dynamic dampers, 10/12/1937
	4	Patent No. 2095791, Roland Chilton and Rudolph F. Gagg, Spark plug shields and coolers, 10/12/1937
	5	Patent No. 2095794, George M. Corbin, Reduction gears, 10/12/1937
	6	Patent No. 2097996, Arthur G. Butler, Auxiliary surface controls, 11/2/1937
	7	Patent No. 2098565, Roland Chilton, Engine cooling and cowling, 11/9/1937
	8	Patent No. 2098566, Roland Chilton, Deicing means for aircraft, 11/9/1937
	9	Patent No. 2098571, Chester C. DePew, Link type dynamic dampers, 11/9/1937
	10	Patent No. 2101239, Roland Chilton, Supercharger drives, 12/7/1937
	11	Patent No. 2102817, Frederick R. Weymouth, Fuselage construction, 12/21/1937
	12	Patent No. 2104590, Henry C. Hill, Fluid metering devices, 1/4/1938
	13	Patent No. 2104599, Paul G. Wellenkamp, Geared connecting rods, 1/4/1938
	14	Patent No. 2109329, Ralph D. Carleton, Engine mounts, 2/22/1938
	15	Patent No. 2110711, Donald G. MacCulloch, Two speed superchargers, 3/8/1938
	16	Patent No. 2110730, Raymond P. Holland, Jr., Stall indicators, 3/8/1938
	17	Patent No. 2110749, Walter Tydon and William O. Watson, Landing gear locking devices, 3/8/1938
	18	Patent No. 2110752, Theodore P. Wright, Methods of applying covering to a frame, 3/8/1938
	19	Patent No. 2113000, Donald C. Rowe, Antiflutter devices, 4/5/1938
	20	Patent No. 2114522, Arthur G. Butler, Steerable tail wheels, 4/19/1938
	21	Patent No. 2115165, Charles E. Hathorn and John W. Dunn, Tank construction, 4/26/1938
	22	Patent No. 2116860, Raymond C. Blaylock and Clem G. Trimbach, Automatic gun chargers, 5/10/1938
	23	Patent No. 2116861, Roland Chilton, Dynamic dampers, 5/10/1938
	24	Patent No. 2117234, Jonathan R. Austin and Donovan R. Berlin, Emergency balancing means, 5/10/1938
	25	Patent No. 2119221, Kenneth Campbell, Engine cowlings, 5/31/1938
	26	Patent No. 2120290, Andre J. Meyer, Adjustable combustion chamber engines, 6/14/1938
	27	Patent No. 2121950, Roland Chilton, Ball suspended dynamic counterweights, 6/28/1938
	28	Patent No. 2122449, Donovan R. Berlin, Aircraft cabins, 7/5/1938
	29	Patent No. 2124078, Richard E. Palmer and Charles S. J. MacNeil, Jr., Controllable pitch propellers, 7/19/1938
	30	Patent No. 2127460, Roland Chilton, Engine accessory drives, 8/16/1938

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12	31	Patent No. 2127461, Roland Chilton, Cylinder head attachments, 8/16/1938	
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	33	Patent No. 2127463, Roland Chilton, Reduction gears, 8/16/1938	
	34	Patent No. 2127464, Roland Chilton, Planetary reduction gears, 8/16/1938	
	35	Patent No. 2128983, Werner J. Blanchard, Aircraft power plant control, 9/6/1938	
	36	Patent No. 2128986, Roland Chilton, Flexible control terminals, 9/6/1938	
	37	Patent No. 2132605, Roland Chilton, Cylinder heads, 10/11/1938	
	38	Patent No. 2132659, Ralph D. Speirs, Pattern construction, 10/11/1938	
	39	Patent No. 2137382, Raymond C. Blaylock, Francis P. Basset, Edward R. Child, and Robert R. Osborn, Wing flaps, 11/22/1938	
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	41	Patent No. 2137385, Arthur G. Butler, Aircraft control systems, 11/22/1938	
	42	Patent No. 2137386, Kenneth Campbell and Philip B. Taylor, Controllable engine cowlings, 11/22/1938	
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	44	Patent No. 2137391, Roland Chilton, Cylinder attachments, 11/22/1938	
	45	Patent No. 2137399, Vinton Higbie and Raymond W. Young, Aircraft engine intercoolers, 11/22/1938	
	46	Patent No. 2137400, Henry C. Hill and Arthur Landauer, Crankcase scavenging scoops, 11/22/1938	
	47	Patent No. 2137418, Charles M. Shay, Dynamic dampers, 11/22/1938	
	48	Patent No. 2137640, Clem G. Trimbach and Camille R. Lemonier, Flexible gun mount control, 11/22/1938	
	49	Patent No. 2139367, Norman L. Kearney, Radiator core construction, 12/6/1938	
	50	Patent No. 2144607, Roland Chilton, Reduction gears, 1/24/1939	
	13	1	Patent No. 2146522, Werner J. Blanchard, Motor control systems, 2/7/1939
		2	Patent No. 2146523, Maitland B. Bleecker and Godfrey B. Speir, Cowling, 2/7/1939
		3	Patent No. 2146524, Maitland B. Bleecker, Dynamic dampers guided for polar and translational movement, 2/7/1939
		4	Patent No. 2146527, Allan Chilton, Radial engine connection rods, 2/7/1939
		5	Patent No. 2146528, Roland Chilton, Rotary valves, 2/7/1939
		6	Patent No. 2146529, Roland Chilton, Magneto mounts, 2/7/1939
7		Patent No. 2146530, Roland Chilton, Spherically formed connecting rod ends and bearings, 2/7/1939	
8		Patent No. 2146538, Fredric E. Flader, Adjustable engine cowlings, 2/7/1939	
9		Patent No. 2146548, Frank Mitschang, Joseph Mitschang, and Julian C. Wander, Flexible abrasive disks, 2/7/1939	
10		Patent No. 2146550, Erol Francis Pierce, Hydraulic valve tappets, 2/7/1939	
11		Patent No. 2146554, Peter F. Rossman, Cooling of machine guns, 2/7/1939	
12		Patent No. 2150537, Donovan R. Berlin, William O. Watson, and Walter Tydon, Retractable landing gears, 3/14/1939	
13		Patent No. 2150540, Allan Chilton, Reduction gears, 3/14/1939	
14		Patent No. 2150541, Roland Chilton, Rotary valves, 3/14/1939	

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13	15	Patent No. 2150546, Fredric E. Flader, Wing structures, 3/14/1939
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	17	Patent No. 2154063, Roland Chilton, Rocking dynamic dampers with floating pin supports, 4/11/1939
	18	Patent No. 2158270, Kenneth A. Brown, Controllable cowling, 5/16/1939
	19	Patent No. 2158272, Roland Chilton, Rocker arm bearings, 5/16/1939
	20	Patent No. 2158273, Roland Chilton, Controllable cowling, 5/16/1939
	21	Patent No. 2158300, George A. Page, Jr., Retractable landing gears, 5/16/1939
	22	Patent No. 2158676, Lloyd F. Engelhardt, Wing flap mechanism, 5/16/1939
	23	Patent No. 2162218, Henry C. Hill, Oil seals, 6/13/1939
	24	Patent No. 2162227, George A. Page, Jr., Pressure fuselage, 6/13/1939
	25	Patent No. 2162243, Kenneth A. Browne, Automatic magneto couplings, 6/13/1939
	26	Patent No. 2162259, William D. Kennedy, Engine oil scavenging devices, 6/13/1939
	27	Patent No. 2165443, Donovan R. Berlin, Aircraft power plants, 7/11/1939
	28	Patent No. 2165447, Kenneth A. Browne, Pressure measuring carburetors, 7/11/1939
	29	Patent No. 2165448, Kenneth A. Browne, Turbosuperchargers, 7/11/1939
	30	Patent No. 2165453, Allan Chilton, Chester C. DePew, and Roland D. Chilton, Multiple engine power plants, 7/11/1939
	31	Patent No. 2165460, Arthur J. Desing, Adjustable length levers, 7/11/1939
	32	Patent No. 2165462, Roland Chilton, Reduction gears, 7/11/1939
	33	Patent No. 2165463, Roland Chilton, Dynamic torque balancers, 7/11/1939
	34	Patent No. 2165482, Paul E. Hovgard, Aircraft wing arrangements, 7/11/1939
	35	Patent No. 2169222, Roland Chilton, Dynamic dampers having single support and cam stabilizer, 8/15/1939
	36	Patent No. 2169243, Vinton Higbie, Supercharger and coder arrangements, 8/15/1939
	37	Patent No. 2172729, Roland Chilton, Centrifugal breathers, 9/12/1939
	38	Patent No. 2172741, Wilton G. Lundquist, Crankshaft torsion dampers, 9/12/1939
	39	Patent No. 2175825, Kenneth A. Browne and Edward S. Taylor, Engine mounts, 10/10/1939
	40	Patent No. 2175852, Kendall Perkins, Turret gun mounts, 10/10/1939
	41	Patent No. 2175876, Roland Chilton, One way clutches, 10/10/1939
	42	Patent No. 2175931, Clem G. Trimbach, Gun pointing accessories, 10/10/1939
	43	Patent No. 2175999, Edward S. Taylor, Flexible engine mounts, 10/10/1939
	44	Patent No. 2178953, Roland Chilton, Hydraulic plunger seals, 11/7/1939
	45	Patent No. 2178960, Rudolph F. Gagg, Cowling, 11/7/1939
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	47	Patent No. 2178998, Carl William Scott, Engine cowlings, 11/7/1939
	48	Patent No. 2179072, Roland Chilton and Allan Chilton, Planetary reduction gears, 11/7/1939
	49	Patent No. 2182961, Roy T. Clay, Vernier controls, 12/12/1939

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13	50	Patent No. 2183011, Rudolph Daub, Radial engine valve gears, 12/12/1939
	51	Patent No. 2183020, Henry C. Hill, Ignition harness, 12/12/1939
	52	Patent No. 2184734, Roland Chilton, Rocking dynamic dampers, 12/26/1939

Subseries II – International Patents, 1916-1935

This subseries consists of information concerning patents issued by Canada, Germany, and the United Kingdom. Canadian materials consist of the original patent certificate, holding the original signature of the Commissioner and containing papers and/or drawings signed by the patent holder. German and British materials do not contain the original patent and instead contain the correspondence between the Curtiss-Wright Patent Division and international patent offices and attorneys.² Materials are organized by country, then by patent number.

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14	1	Canada Patent No. 168910, Glenn H. Curtiss, Hydroaeroplane boats, 4/18/1916
	2	Canada Patent No. 173948, Glenn H. Curtiss, Multiple control systems for prime movers, 12/19/1916
	3	Canada Patent No. 174099, Glenn H. Curtiss, Lubricating systems for travelling motors, 12/26/1916
	4	Canada Patent No. 187241, Charles B. Kirkham, Aerial propeller fastenings, 10/29/1918
	5	Canada Patent No. 187331, Glenn H. Curtiss and John P. Tarbox, Multiple step flying boats, 11/5/1918
	6	Canada Patent No. 187332, Nelson W. Dalton, Convertible control systems, 11/5/1918
	7	Canada Patent No. 187333, Nelson W. Dalton, Streamline shock absorbers, 11/5/1918
	8	Canada Patent No. 187334, Henry Kleckler, Tail skids for aeroplanes, 11/5/1918
	9	Canada Patent No. 187335, Henry Kleckler, Tail skids for aeroplanes, 11/5/1918
	10	Canada Patent No. 187381, Henry Kleckler, Triplanes, 11/12/1918
	11	Canada Patent No. 188301, Glenn H. Curtiss, Flying boat hulls, 1/14/1919
	12	Canada Patent No. 188302, Glenn H. Curtiss, Aircraft, 1/21/1919
	13	Canada Patent No. 190201, Henry Kleckler, Fuselages for aeroplanes, 5/6/1919
	14	Canada Patent No. 191903, Glenn H. Curtiss, Triplane flying boats, 7/29/1919
	15	Canada Patent No. 192354, Glenn H. Curtiss, Flying boats, 8/26/1919
	16	Canada Patent No. 192355, Glenn H. Curtiss, Flying boat hulls, 8/26/1919
	17	Canada Patent No. 192469, Glenn H. Curtiss, Autoplanes, 9/2/1919
	18	Canada Patent No. 193014, Joseph G. Coffin, Barometer construction, 9/30/1919

² Patent names and holders were determined by searching “espacenet,” the search engine of the European Patent Office, <http://ep.espacenet.com>.

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14	19	Canada Patent No. 193580, Glenn H. Curtiss, Triplane speed scouts, 11/4/1919
	20	Canada Patent No. 204593, Henry Kleckler, Dual interlocking controls, 10/5/1920
	21	Canada Patent No. 206342, William L. Gilmore, Fighting aeroplanes, 12/7/1920
	22	Canada Patent No. 206983, John A. Christen, Multiple control systems for multi-motored aircraft, 12/28/1920
	23	Canada Patent No. 211904, Thomas S. Kemble, Exhaust mufflers, 5/24/1921
	24	Canada Patent No. 217509, William L. Gilmore and Joseph F. Meade, Landing gear, 4/4/1922
	25	Canada Patent No. 224499, William L. Gilmore and Glenn H. Curtiss, Hydro-aero machines, 10/3/1922
	26	Canada Patent No. 229060, Grover Cleveland Loening, Airplanes, 2/27/1923
	27	Canada Patent No. 253211, Grover Cleveland Loening, Airplanes, 9/1/1925
	28	Germany Patent No. 81735, Sylvanus Albert Reed, Propeller, 5/3/1935
	29	United Kingdom Patent No. 362748, Wright Aeronautical, assignee Roland Chilton, Improvements in or relating to yielding clutches, 12/10/1931
	30	United Kingdom Patent No. 363201, Wright Aeronautical, assignee Roland Chilton, Improvements in or relating to cooling devices for internal combustion engines, 12/17/1931
	31	United Kingdom Patent No. 371710, Curtiss Aeroplane and Motor Company, assignees George A. Page, Jr., and George E. Warren, Improvements in or relating to cowling rings, 4/28/1932
	32	United Kingdom Patent No. 371892, Wright Aeronautical, assignee Rudolph Farewell Gagg, Improvements in or relating to shielding devices for electrical ignition systems, 4/29/1932

Series II – Patent File Wrappers, 1916-1930

A file wrapper is the folder prepared by the United States Patent and Trademark Office containing a complete record of proceedings from the filing of the initial patent application to the issued patent.³ The original accordion folder containing these materials noted that these were the original assignments relative to the title in Curtiss Aeroplane and Motor Company and Curtiss Assets Corporation matters. Materials are organized by patent number.

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³United States Patent and Trademark Office, “Glossary,” <http://www.uspto.gov/main/glossary/#f>, accessed August 18, 2010.

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	14	Chain of Title of Curtiss Patents, 1930-1954
	15	Curtiss Matters [unfiled material]

Series III – Patent Litigation, 1916-1947

The Curtiss-Wright Corporation was involved in numerous legal disputes with other major aircraft companies over patent rights. The majority of the series consists of materials dated between 1929 and 1934 placed in files by Curtiss-Wright during the pursuit of patent litigation. File contents include copies of the proceedings, correspondence and memoranda, aircraft drawings and blueprints, advertising brochures, and copies of related patents. The series also contains copies of patents that were not associated with a case file, but might have been used for research. Materials are arranged by a file number created by Curtiss-Wright, followed by unfiled materials ordered by date.

Materials were originally stored in accordion folders, with additional manila folders inside. The front page of the accordion folder, which contained the case name, case number, and a list of the patents involved, was placed in the first folder of each file number.

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16	1	File No. 291, Curtiss Assets Corporation vs. Consolidated Aircraft Corporation, Equity No. 748, Proceedings, 1929
	2	File No. 291, Curtiss Assets Corporation vs. Consolidated Aircraft Corporation, Equity No. 748, The New York, Rio, and Buenos Aires Line Incorporated, 1929
	3	File No. 291, Curtiss Assets Corporation vs. Consolidated Aircraft Corporation, Equity No. 748, General Three Suits, 1929
	4	File No. 310, Curtiss Assets Corporation vs. The Waco Aircraft Company, Equity No. 268, Proceedings, 1930
	5	File No. 310, Curtiss Assets Corporation vs. The Waco Aircraft Company, Equity No. 268, Correspondence, 1930
	6	File No. 310, Curtiss Assets Corporation vs. The Waco Aircraft Company, Equity No. 268, Waco information, no date
	7	File No. 311, Curtiss Aeroplane and Motor Company, Inc., vs. The Waco Aircraft Company, Equity No. 269, Proceedings and copies, 1929
	8	File No. 315, Curtiss Assets Corporation vs. Bellanca Aircraft Corporation, Equity No. 805, Proceedings, 1930-1933
	9	File No. 315, Curtiss Assets Corporation vs. Bellanca Aircraft Corporation, Equity No. 805, Correspondence and blueprints, 1930-1933
	10	File No. 315, Curtiss Assets Corporation vs. Bellanca Aircraft Corporation, Equity No. 805, Patents in suit, 1916-1922

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17	1	File No. 316, Curtiss Assets Corporation vs. Bellanca Aircraft Corporation, Equity No. 845, [Notices, Stipulations, Blueprints], 1930-1931
	2	File No. 316, Curtiss Assets Corporation vs. Bellanca Aircraft Corporation, Equity No. 845, Date Re: Evidence [Orville Wright Interview and Correspondence], 1931-1932
	3	File No. 316, Curtiss Assets Corporation vs. Bellanca Aircraft Corporation, Equity No. 845, Extra copies and memorabilia, 1930-1933
	4	File No. 321, Curtiss Assets Corporation vs. Ford Motor Company, Equity No. 864, Proceedings, 1930-1931
	5	File No. 321, Curtiss Assets Corporation vs. Ford Motor Company, Equity No. 864, Correspondence, 1930-1934
	6	File No. 321, Curtiss Assets Corporation vs. Ford Motor Company, Equity No. 864, Papers to be filed as needed at hearing [Notice and stipulation], 1931
	7	File No. 321, Curtiss Assets Corporation vs. Ford Motor Company, Equity No. 864, Memoranda, 1931-1932
	8	File No. 321, Curtiss Assets Corporation vs. Ford Motor Company, Equity No. 864, Wright patent for Improvement in Flying Machines, original issued December 29, 1914, copied May 15, 1931,
	9	File No. 325, Curtiss Assets Corporation vs. Nicholas-Beazley Airplane, Co., Inc., Equity No. 269, Proceedings, 1931
	10	File No. 325, Curtiss Assets Corporation vs. Nicholas-Beazley Airplane, Co., Inc., Equity No. 269, Memoranda and copies of patents in suit, 1930-1931
	11	File No. 325, Curtiss Assets Corporation vs. Nicholas-Beazley Airplane, Co., Inc., Equity No. 269, Correspondence, 1929-1932
	12	Patent No. 1122348 - Assignment, October 30, 1930
	13	Aerial Camera and Mapping Patents, 1916-1930
	14	Bellanca Patents, 1931-1932
15	Non-Curtiss-Wright Patents, 1916-1931	
16	Docket No. 19832, Tom Clark v. Wright Aeronautical Corporation, 1947	

This series consists of business records collected and released by the Curtiss-Wright Corporation. Included are photocopies of twenty-three historical Curtiss-Wright documents including the Wright brothers' original patent certificate and other Wright patents, Glenn Curtiss' original patent for the first flying boat, and stock certificates issued to Wright Aeronautical Corporation. The location of the original documents is unknown. The series holds research reports and documents submitted to the U.S. Navy Department Bureau of Aeronautics. The series also contains the 1944 and 1945 minutes and reports from the Curtiss-Wright Patent Department and Development Division Technical Committee. Materials are arranged chronologically.

<u>Box</u>	<u>Folder</u>	
18	1	Photocopies of Historic Curtiss-Wright Documents, 1906-1928 [Folder 1 of 2]
	2	Photocopies of Historic Curtiss-Wright Documents, 1906-1928 [Folder 2 of 2]
	3	International Nickel Company, Directory, United States Aircraft Engine Manufacturers, First Edition, February 1, 1930
	4	Statements by F.H. Russell to the Patents Committee of the U.S. House of Representatives Regarding the Manufacturers Aircraft Association, Inc., December 4, 1935
	5	[Report to U.S. Navy Department] Wright Aeronautical Corporation, Serial No. 248, Supplement No. 1, Report on Fifty Hour Endurance Test at 750 HP, 1950 RPM of Wright Cyclone Model SGH-1820F2 Engine No. 17920 with W.A.C. Dynamic Damper, January 26, 1935
	6	[Report to U.S. Navy Department] Wright Aeronautical Corporation, Serial No. 248, Supplement No. 2, Report on Endurance Testing of the W.A.C. Dynamic Damper on Wright Cyclone Model SCR1820F-2 Engine No. 17920, March 18, 1935
	7	[Report to U.S. Navy Department] Wright Aeronautical Corporation, Serial No. 248, Supplement No. 2, Appendix No. 1, Report on Endurance Testing of the W.A.C. Dynamic Damper on Wright Cyclone Model SCR1820F-2 Engine No. 17920, March 18, 1935
	8	[Report to U.S. Navy Department] Wright Aeronautical Corporation, Serial No. 248, Supplement No. 3, Report on Summary of Testing on W.A.C. Dynamic Damper, April 1, 1935
	9	[Report to U.S. Navy Department] Wright Aeronautical Corporation, Serial No. 248, Supplement No. 4, Report on Torsional Vibration Characteristics of the W.A.C. Dynamic Damper on a Direct Drive SR-1820F-52 Engine, April 25, 1935
	10	[U.S. Navy Department Experimental Contract] Pathfinder Apparatus - Instructions, 1944
	11	[U.S. Navy Department Experimental Contract] Pathfinder Apparatus - Correspondence, 1944
	12	Curtiss-Wright Development Division Technical Committee, 1944-1945
	13	Numbers Assigned to Curtiss-Wright Projects, 1944-1945
	14	Curtiss-Wright Patent Department - Monthly and Annual Reports, 1944-September 1945