HEINL RADIO BUSINESS LETTER

INSURANCE BUILDING

WASHINGTON, D. C.

SSUED TWICE A WEEK AND CONTAINING THE LATEST INFORMATION REGARDING THE RULINGS OF THE FEDERAL ADIO COMMISSION, RADIO LEGISLATION, DEPARTMENT OF COMMERCE REGULATIONS, CHANGES IN WAVELENGTH, ALL LETTERS AND POWER, PATENTS, EXPORTS, FEDERAL TRADE COMMISSION RULINGS AND OTHER MATTERS OF NTEREST TO BROADCASTERS AND MANUFACTURERS. :: :: CONFIDENTIAL—NOT FOR PUBLICATION. :: ::

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No. 462

HOW WORLD RADIO SETS ARE DISTRIBUTED

The United States still has well over a third of the broadcasting receiving sets of the world, even on the basis of a conservative estimate, according to tabulations just made by Lawrence D. Batson, of the Electrical Equipment Division of the Department of Commerce.

With an estimate of only 10,500,000 sets in this country, there are a total of 26,243,032 receivers in the world, the survey reveals. Dr. Julius Klein, Assistant Secretary of Commerce, recently estimated that there are a billion people within the range of broadcasting stations now established. On the basis of five listeners to every set, he said, it would require 200,000,000 sets to provide facilities for all of them to tune in on programs available.

The 10,500,000 estimated sets in this country constitutes an overwhelming majority of the 10,927,888 sets on the North American continent. Canada and Mexico are the only other countries which have any appreciable number of receivers, their totals being 284,580 and 100,000 respectively. The only other principality which has over 5,000 sets is Cuba with 28,875.

Porto Rico has 5,000, while Greenland sets the low mark with 25 receivers and no broadcasting stations. Alaska, which boasts one of the best climates for world reception, has 1,500 sets.

Argentina sets the pace for South America with 400,000 receivers, out of a total of 721,826 on the continent. Brazil comes second with 190,000, while French Guiana ranks lowest with 8 sets.

The whole of Europe, including the British Isles, has only 13,292,097 sets, which is approximately the total expected to be established for this country when the 1930 census is completed.

The United Kingdom leads with 3,411,910 sets and so ranks second to the United States in the world count. Germany comes a close second with 3,241,725, while France and Russia follow in order with 2,000,000 and 1,000,000, the latter including Russian territory in Asia.

The only other European country which has more than 500,000 sets is Spain, and it tops this mark by only 50,000. The nations which approach this figure are Sweden with 460,750, Austria with 439,322, and Denmark with 437,244.

On the basis of sets per 1,000 population, Denmark outranks them all and runs second to the United States. Sweden ranks third in the world on the same scale.

The whole of Asia has less than 1,000,000 sets, its total being 849,313. Japan, with 795,523, has the largest share of these. China, despite its teeming millions of inhabitants, has only 15,000 receivers. India's count is 7m682. The small, though progressive, Siam boasts 5,043.

Australia has 329,134 sets, while New Zealand has 61,449. The whole of Africa includes but 45,483 receivers, and of this number 25,121 are in the Union of South Africa. Algeria ranks next with 10,000.

Fifty-five of the principalities charge listeners for the privilege of operating a receiving set and to support broadcasting stations. These annual fees reach a minimum of \$2 to \$2.50 in countries where such licenses are intended to maintain broadcasting. The amount of the fee varies largely with the distribution of wealth. Turkey makes radio reception a luxury by charging \$44 a year for a receiver's license, while Venezuela charges the second highest tax of \$11.58. France's fee of 39 cents is the cheapest in Europe.

Broadcasting is supported by broadcasters in 31 of the countries which have stations. Governments provide the support in a dozen countries, and in 28 the listeners furnish the costs directly. Even in most of the nations in which broadcasting supported by broadcasters fees are required of listeners.

The rank of all countries having more than 1,000 receiving sets, in their order, follows:

United States, United Kindgom, Germany, France, Russia, Japan, Spain, Canada, Sweden, Austria, Denmark, Argentina, Australia Czechoslovakia, Hungary, Netherlands, Poland, Brazil, Italy, Mexico, Switzerland, Finland, Norway, Peru, Belgium, New Zealand, Yugo-slavia, Rumania, Latvia, Chile, Cuba, Irish Free State, Union of South Africa, Uruguay, Estonia, Hawaii, China, Chosen, Lithuania, Algeria, India, Turkey, Siam, Colombia, Porto Rico, Tunisia, Kwantung, Philippines, French Morocco, Portugal, Venezuela, Luxemburg, Hong Kong, Bulgaria, Alaska, Ceylon, Greece, Dominica Republic, Newfoundland and Labrador, French India, and Haiti.

Copies of Mr. Batson's tabulations may be obtained from the Electrical Division of the Department of Commerce.

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RMA FIGHTS LATIN-AMERICAN TARIFFS

Assistance of the State Department has been accorded to Radio Manufacturers' Association in opposing drastic increases ordered recently by Latin-American countries in their tariff rates on radio apparatus, according to an RMA announcement. Four countries - Argentina, Uruguay, Costa Rica and Mexico - decreed higher customs rates on radio sets, tubes, phonographs and phonograph records.

A vigorous protest against the new Latin-American radio tariffs was made to the State Department by Bond Geddes, Executive Vice President of the RMA. Members of the Association also were urged by Arthur Moss of New York, Chairman of the RMA Foreign Trade Committee, to have their Latin-American representatives follow up the protest direct to the Latin-American Governments concerned.

In response to the RMA protest, the State Department cabled appropriate instructions to the American Ambassador at Buenos Aires and the American Minister at Montevideo. Ambassador Bliss at Buenos Aires is working in accord with Argentine importers who are filing protests direct with the Argentine Government for reduction of rates or an extension of time in connection with the new Argentine tariff. The Argentine decree is effective July 31st. It would increase radio tariffs from 100 to 500 per cent. Uruguay proposes to prohibit entirely the importation of "luxuries", the list including electrical refrigerators, as well as radio apparatus.

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BRITAIN PLANS RADIO-EQUIPPED CRUISERS

Patrolling of the entire British coast line during stormy weather by fast life-boat cruisers, equipped with radio, is held to be likely in the immediate future, Trade Commissioner Floyd Sullivan, London, has reported to the Department of Commerce.

The Board of Trade inquiry into the yachting accident, in which a prominent Member of Parliament and five companions were drowned last year, will probably result in extensive developments in wireless telephone communication between all parts of the British coast, the report states.

It is considered very probable that the report of the inquiry in question will recommend the linking up of every part of the coast by wireless telephone, and the patrolling of the coast during stormy weather by fast lifeboat cruisers, equipped with wireless telephones.

CBS TELEVISION RECEIVED IN TORONTO

Toronto and Chicago are the latest cities to report clear reception of the Columbia Broadcasting System's television station W2XAB, in New York City.

The Toronto listener who wrote to the New York key-station of the network said that he heard the sound over W2XE clearly while the pictures came through with regularity and clarity not surpassed by any station he has received.

Chicago listeners regularly report both sight and sound reception. Many say that little or no interference is present from local transmitters, so strong are the Columbia signals in that city.

Other reports are arriving from Pittsburgh, Buffalo, Boston, Schenectady, Camden, N. J., Washington, D. C., Roanoke, Va., Rochester, Syracuse and Baltimore.

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RADIO TO CONTROL BATTLESHIP TARGET

The Navy Department, in making public plans for the conversion of the "Utah" into a radio controlled target, announced that the old battleship will be operated by a number of receiving sets in various parts of the warship. The controlling signals will be sent from a specially equipped destroyer.

The signals from the destroyer will direct the "Utah's" course and speed, lay down smoke screens and otherwise maneuver the vessel.

Navy radio experts maintain that when the installation is complete, the "Utah" will be equipped to maneuver in every way as though she were carrying a crew of several hundred men. No radio control for the guns will be installed, however.

The speed of the "ghost ship" will be controlled by radio signals which will open and close electric switches, open and close throttle valves, and regulate the supply of oil entering the boilers. Another set of switches will control the rudder, moving it from left to right as desired. An automatic steering device, known as the "iron mike", recently perfected for merchant ships, will hold the course, once it is set by radio waves.

One radio-controlled target, the destroyer "Stoddert" is already in use on the Pacific Coast, and has been repeatedly used in maneuvers. Two additional destroyers will also be shortly equipped with radio control for use as target vessels, and will join the "Stoddert" and "Utah" as a part of the "ghost fleet."

LOUISIANA FAR SHORT OF ESTIMATES

Louisiana fell far short of the estimate of the radio industry and the Department of Commerce as to its number of radio receivers in 1930, according to the Census Bureau figures.

Only 11.2 per cent, o5 54,364, of Louisiana's 54,364 families reported sets when the Census Bureau made its count. The trade estimate was 121,000.

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MANUFACTURERS SEE UPSWING IN BUSINESS

Coming on top of the preciction of Dr. Julius Klein, Assistant Secretary of Commerce, that the radio industry "will probably as a minimum have to double its operations during the next five years", are just as enthusiastic assertions of confidence on the parts of leading American radio set manufacturers whose opinions were sought by G. Clayton Irwin, Jr., General Manager of the Eighth Annual Radio Electrical World's Fair, which is to be held at Madison Square Garden, New York City, the week of September 21st.

Careful merchandising, newspaper advertising and judicious sales tactics are the weapons the manufacturers are choosing to insure radio's advance. The present 1931-1932 season, at least one major set manufacturer believes, will be the greatest the industry has yet seen.

A sharp increase in the use of electrical household appliances, which will react to the benefit of the thousands of radio dealers, is destined to accompany the advance of radio, Mr. Irwin believes.

B. J. Gribsby, President of the Grigsby-Grunow Company, Chicago, says the industry has already sensed the renewed public interest in radio and is now prepared to meet its responsibility.

"After careful consideration of all factors entering into general business and the public attitude on such commodities as radio", said Mr. Grigsby, "it is my sincere and unbiased opinion that the approaching fall season will be one of the greatest that the radio industry has yet seen."

Power Crosley, Jr., President of the Crosley Radio Corporation, Cincinnati, claims that these are normal times and manufacturers have to get after business - not wait for it to come to them.

"It is normal for people to work for what they get", Mr. Crosley remarked. "I believe that when things fall in our laps and business comes without effort, things are abnormal. There-

fore, it behooves all of us - those in the radio business in particular - to forget that there was a time when people mobbed radio stores to buy radio apparatus, and, instead, to get out and work for business."

R. W. Jackson, Vice-President of the Brunswick Radio Corporation, New York City, sees public interest in radio increasing from every direction.

"Probably the main contributing element", he said, "is the fact that radio manufacturers are building into radio instruments a degree of musical quality heretofore not attained, and at a retail price that will be highly acceptable to the public."

H. E. Capehart, President of the Capehart Corporation, of Fort Wayne, Indiana, sees the 1931-1932 season as an excellent period to supply the public's demand for quality merchandise.

"People have been saving money and waiting for better values", Mr. Capehart said, "and they are now available. Values are greater in radio today than ever before. With the proper presentation of a quality product at fair prices to the consumer, there is every reason to believe that the result will be quantity sales."

Frank Holmstrom, Jr., Vice-President in charge of sales of Kolster Radio, Inc., which is backed by Mackay Radio & Telegraph Company, sees the replacement market as a large contributor towards the success of the new season.

"Speaking in generalities", Mr. Holmstrom said, "we can confidently expect very satisfactory radio business this Fall. Radio has become so much a part of the life of our nation that it is no longer considered a luxury but a very necessary part of home life.

"The new sets offered by radio manufacturers this Fall will tempt owners of obsolete sets to scrap them and enjoy modern reception. The vast number of new families that will go to housekeeping will include radio in their first year's budget. The thousands upon thousands of newly wired homes will want electrically operated sets. Surprising as it may seem, there are millions of homes that have yet to buy their first set."

The new season's lines of all major manufacturers will be revealed to the public at the Eighth Annual Radio-Electrical World's Fair. Radio receivers containing the latest innovations will be in the elaborate exposition. Combination radio-phonograph and home-talkie units will also be shown by prominent manufacturers.

N. Y. C. PLANS RADIO POLICE SYSTEM

An appropriation of \$100,000 in the 1932 New York City budget will be asked to provide three short-wave radio broadcasting stations and short-wave receiving sets for each of the 250 police squad cars, the two police airplanes and the police launches so that word of gang killings and other crimes of violence can be broadcast to roving police on "scrambled" radio waves which can be picked up only by police receivers, according to the New York Times.

Police Commissioner Mulrooney said that he would request the appropriation at this Fall's budget hearings of the Board of Estimate.

If the appropriation is granted, as the Commissioner believes it will be, the police will be equipped with a crime-fighting weapon which has been found extremely effective in the thirty-odd cities of the United States where it is already in use.

Under the Commissioner's plan, drafted by Thomas W. Rochester, Chief Electrical Engineer of the Department, one station would be built in Manhattan to cover that borough and Richmond, another in the Bronx and part of Queens to be covered, and the third in Brooklyn. Mr. Rochester has conferred with radio experts in Washington, the Commissioner said, and has been told the three short waves could be obtained for police use. The "scrambled" waves, he explained, are of the sort used to prevent eavesdropping on transatlantic telephone communication.

Should the Board of Estimate grant the request, the new system would be installed the early part of next year. Along with it would be created a new police bureau, the Radio Bureau, whose function would be to maintain the efficiency of the stations and the receivers and to broadcast the alarms.

Back in 1920, Commissioner Enright purchased \$60,000 worth of radio receivers with the aim of placing them in every station house. However, the project failed.

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RADIO EDUCATION TOPIC AT WORLD CONGRESS

For the first time an international conference will consider the subject of education by radio when the World Association for Adult Education at Vienna takes up the topic at its three-day meeting which opened today.

Levering Tyson, Director of the National Advisory Council of Radio in Adult Education in the United States, is Chairman of the conference. During the three-day session, such subjects as the use of broadcasting directly and indirectly in education will be discussed. Consideration will be given to the technique in

broadcasting the spoken word and the principles underlying educational broadcasts as well as the relationship between the broadcasters and the listeners.

The scope of the discussions will be wide. Speakers will treat all fields of knowledge in their application to broadcasting from art to zoology. Hygiene, music, politics, teaching, the development of international industry, and the technique of presenting the various subjects are among a variety of topics included in the program.

Seventy delegates from various countries of the world are present at the meeting. It is expected that definite resolutions will be presented and brought back by them to their respective countries for study by the educational authorities.

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BUSINESS LETTER BRIEFS

Two more Superheterodyne radio receivers, the Nos. 25 and 26, have just been placed on the market by the Stromberg-Carlson Telephone Manufacturing Company.

G. W. "Johnny" Johnstone again heads the Press Relations Department of the NBC, following the resignation of Walter Stone. He will continue his work as special assistant to Mr. Aylesworth also.

Maj. Gen. Charles McK. Saltzman, Chairman of the Radio Commission, has returned to his desk after a vacation of several weeks at Lake George, New York.

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APPLICATIONS RECEIVED BY FEDERAL RADIO COMMISSION

August 18 - WPAW, Shartenberg & Robinson Co., Pawtucket, R. I., license to cover C. P. granted 5/15/31 for change in equipment only; WTBO, Associated Broadcasting Corp., Cumberland, Md., install automatic frequency control; Clayton B. Johnson, Sandusky, Ohio, C. P. resubmitted amended to request 1500 kc., instead of 1490 kc., also amended as to equipment; WJTL, Oglethorpe University, Oglethorpe University, Ga., C. P. to move transmitter from Oglethorpe University to Atlanta, Ga.; KTSA, Lone Star Broadcast Co., Inc., San Antonio, Texas, license to cover C. P. granted 4/10/31 for change in equipment and local transmitter move; KOIL, Mona Motor Oil Co., Council Bluffs, Iowa, direct measurement of antenna input; KGW, Oregonian Publishing Co., Portland, Oregon, license to cover C. P. granted 6/26/31 to move transmitter to Faloma, Oregon.

Applications, Other Than Broadcasting

August 18, 1931 - Eastern Air Transport, Inc., Plane NC-622-V, new license for aircraft 3070, 3076, 5690 kc., 10/15 watts; KWO, Transpacific Communication Co., Ltd., Dixon, California, license to cover C. P. for 7565, 7610, 10840, 15355, 15415, 21060 kc., 20 KW, point-to-point; Aeronautical Radio, Inc.: WSDQ, Berea, Ohio, and WSDM, Albany, N. Y., licenses to cover C. P. for 2326, 2344, 4140, 6260, 6275 kc., 400 watts, point-to-point, aronautical; also, for same stations, licenses to cover C. P. for 3238, 3244, 3452, 3460, 3468, 3484, 5600, 5630 kc., 400 watts, aeronautical.

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PATENTS, PATENT SUITS, TRADE-MARKS

The following patents were granted during the week ending August 18, 1931:

- 1,818,987. Radio Loud Speaker and the Like. Charles Hugh Duffy, Miami, Fla. Filed June 30, 1930.
- 1,819,069. Static Frequency Changer. Ralph K. Bonell, East Orange, N. J., assignor to American Telephone and Telegraph Co. Filed October 2, 1928.
- Phonograph Reproducer. William H. Edwards, Great Neck, 1,819,083. N. Y., assignor to American Telephone and Telegraph Co. Filed May 14, 1929.
- Loud Speaker Device. Israel Ludlow, New York, N. Y., assignor to Albert E. Lamb (one-half), New York, N. Y. 1,819,183. Filed January 14, 1926.
- 1,819,197. Photoradioscope. Richard Howland Ranger, Newark, N. J., assignor to Radio Corporation of America. Filed January 9, 1928. Renewed April 5, 1930.
- Loud Speaker. Adolph A. Thomas, New York, N. Y., 1,819,210. assignor to United Reproducers Corporation. Filed August 21, 1928.
- 1,819,246. Variable Resistance Unit. Lester L. Jones, Oradell, N. J. Filed March 28, 1929.
- 1,819,264. Picture Recording. Richard Howland Ranger, Newark, N.J., and Francis G. Morehouse, Greenwich, Conn., assignors to Radio Corporation of America. Filed December 7, 1928.
- Radio Circuit. Brunson S. McCutchen, North Plainfield, 1,819,298. and Carl V. Sandell, East Orange, N. J. Filed March 18, 1926.
- 1,819,299. Tuning System. John M. Miller, Philadelphia, Pa., assignor to Atwater Kent Manufacturing Company, Philadelphia, Pa. Filed July 3, 1930.
- 1,819,469. Radio System. Wilhelm Kummerer, Berlin, Germany, assignor, to Gesellschaft fur Drahtlose Telegraphie m.b.H., Berlin, Germany. Filed February 1, 1926, and in Germany April 20, 1925.
- 1,819,477. Radio Receiving Apparatus. Vital Paquit, New York, N.Y. Filed November 6, 1925.

- 1,819,487. Electrical Frequency Stabilizer or Time Control Device. John Arthur Smale, Brentwood, England, assignor to Radio Corporation of America. Filed June 1, 1928, and in Great Britain, June 27, 1927.
- 1,819,508. Communication By Frequency Variation. Clarence W. Hansell, Rocky Point, N. Y., assignor to Radio Corporation of America. Filed August 11, 1927.
- 1,819,511. Circuit for Amplifier Tubes. Ray H. Holmes, Wilkins-burg, Pa., assignor to Westinghouse Electric & Manufacturing Co. Filed March 18, 1925.
- 1,819,589. Means For Elimination of Fading on Short Wave Lengths. Harold H. Beverage and Harold O. Peterson, Riverhead, N. Y., assignors to Radio Corporation of America. Filed January 2, 1926, and in the Netherlands December 31, 1926.
- 1,819,596. Combined Machine for Exhausting, Bombarding, and Sealing of Radio Tubes, Lamp Bulbs, and the Like. Charles Eisler Newark, N. J., assignor to Eisler Electric Corporation. Filed April 25, 1925.
- 1,819,604. Constant Potential Device. Andreas Jaumann, Berlin-Charlottenburg, Germany, assignor to Siemens & Halske, Aktiengesellschaft, Siemensstadt, near Berlin, Germany. Filed February 27, 1929, andin Germany February 17,1928.
- 1,819,609. Beat-Frequency Heterodyne Receiver Arrangement. Siegmund Loewe, Friedenau, Berlin, Germany, assignor to Radio Corporation of America. Filed November 3, 1926, and in Germany November 4, 1925.
- 1,819,614. Wave Transmission System. Robert C. Mathes, Wyoming, N. J., assignor to Bell Telephone Laboratories, Inc., New York, N. Y. Filed March30, 1929.
- 1,819,627. Sound Reproducer and Method of Manufacturing the Same.
 LeRoy W. Staunton, Jackson Heights, N. Y., and Cyril A.
 Brigham, East Orange, N. J., assignors to Brandes
 Laboratories, Inc., Newark, N. J. Filed October 8, 1925.
- 1,819,629. Vacuum Tube Circuits. Donald F. Whiting, Port Washington, N. Y., assignor to Bell Telephone Laboratories, Inc., New York, N. Y. Filed January 29, 1926.
- 1,819,648. Wave Transmission System. Robert C. Mathes, Wyoming, N.J. assignor to Bell Telephone Laboratories, Inc., New York, N. Y. Filed March 30, 1929.
- 1,819,649. Wave Transmission System. Robert C. Mathes, Wyoming, N.J., assignor to Bell Telephone Laboratories, Inc., New York, N. Y. Filed March 30, 1929.

- 1,819,659. Sound Reproducing Diaphragm. LeRoy W. Staunton, Jackson Heights, N. Y., assignor to Brandes Laboratories, Inc., of Newark, N. J. Filed June 30, 1926.
- 1,819,692. Variable Condenser. Lazarus Shapiro, Bronx, N. Y., assignor to Radio Corporation of America. Filed January 9, 1923.
- 1,819,721. Sound Reproducing Device. John McWilliams Stone, St. Charles, Ill. Filed July 26, 1929.
- 1,819,737. Radio Recording Means. Richard M. Craig, San Antonio, Texas. Filed September 5, 1929.
- 1,819,783. Radio Circuits Employing Alternating Current Radio Tubes. Frederick S. McCullough, Wilkinsburg, Pa. Filed May 4, 1925.
- 1,819,805. Radio Vacuum Tube Socket Adapter. Nathan Zuckerman, Brooklyn, N. Y. Filed February 18, 1928. Renewed May 18, 1931.
- 1,819,820. Sound Recording and Reproducing Means. Earle L. Kent, Carthage, Mo. Filed June 11, 1929.
- 1,819,845. Thermionic Amplifier and Oscillation Generator. Henry Joseph Round, London, England, assignor to Radio Corporation of America. Filed July 19, 1926, and in Great Britain, July 20, 1925.
- 1,819,868. Electroresponsive Device. Emmett F. Carter, Schenectady, N. Y., assignor to General Electric Company. Filed December 8, 1924.
- 1,819,904. Antenna Regulator. Joseph E. Love, Schenectady, N. Y., assignor to General Electric Company. Filed August 12, 1927.
- 1,819,905. Radio Apparatus. James Lyons, Jr., New York, assignor of one-half to Lawrence W. Luellen, Mountain Lakes, N.J. Filed January 28, 1927.
- 1,819,908. Electric Testing Circuit, Harold T. Maser, Schenectady, N. Y., assignor to General Electric Company. Filed October 1, 1930.
- 1,819,964. Electromechanical Vibrator. Albert Emile Gustave Nandillon, Cherbourg, France, and Andre Emile Cottet, Brussels, Belgium. Filed May 22, 1928, and in France May 28, 1927.
- 1,820,004. Aerial Navigation System and Method. Geofrey Gottlieb Kruesi, Palo Alto, Calif., assignor to Federal Telegraph Company, San Francisco, Calif. Filed June 12, 1928.

Patent Suits

- 1,173,079, E. F. Alexanderson, Selective tuning system; 1,251,377,
 A. W. Hull, Method of and means for obtaining constant direct
 current potentials; 1,297,188, I. Langmuir, System for amplifyin
 variable currents; 1,618,071, F. Lowenstein, Wireless telegraph apparatus; 1,702,833, W. S. Lemmon, Electrical condenser;
 1,728,879, Rice & Kellogg, Amplifying system, filed June
 16, 1931, D. C., S. D., N. Y., Doc. E 60/174, Radio Corp. of
 America et al. v. F. W. Lang et al. (Lang Radio Co.).
- 1,231,764, F. Lowenstein, Telephone relay; 1,403,475, H. D. Arnold, Vacuum tube circuit; 1,465,932, E. H. Colpitts, Multiplex radio telegraph system; 1,403,932, R. H. Wilson, Electron discharge device, filed June 16, 1931, D. C., S. D., N. Y., Doc. E 60/175 Radio Corporation of America, et al v. F. W. Lang et al (Lang Radio Co.).
- 1,266,988, Pridham & Hensen, Amplifying receiver; 1,448,279, 1,579,392, same, Electrodynamic receiver, D. C., N. D. Calif. (San Francisco), Doc. 2166-S, The Magnavox Co., v. F. H. Thompson Co. Decree for plaintiff June 8, 1931.
- 1,271,527, 1271,529, M. C. Hopkins, Sound regenerating machine, D. C. Mass., Doc. E. 2535, Lektophone Corp. v. C. M. Boudette et al (Boudette Mfg. Co.). Dismissed April 6, 1926.

Trade-Marks

- Ser. No. 303,532. Electrad, Inc., New York, N. Y. Filed July 16, 1930. "DURATROL" for Impedance Units for use as electric motor controls, voltage controls, volume and tone controls for electric sound projecting apparatus, rheostats, and resistors. Claims use since April 26, 1930.
- Ser. No. 314,436. United States Radio & Television Corporation, Marion, Ind. Filed May 11, 1931. "Gloriette" for Radio Sending and receiving sets. Claims use since April 1, 1931.
- Ser. No. 316,060. United American Bosch Corporation, Springfield, Mass. Filed June 19, 1931. "PERSONAL" for Radio Receiving Sets. Claims use since May 29, 1931.
- Ser. No. 316,073. RCA Victor Company, Inc., Camden, N. J., Filed June 18, 1931. "Superette" for Radio Receiving sets, kits for radio receiving sets, electric pic-ups for phonographs, and accessories and parts consisting of aerials, battery eliminators, binding posts, chokes, coils, coil sets, condensers dials, grid leaks, jacks, loud speakers, panel boards, potentiometers, radio amplifying units, radio rectifying units, rheostats, shields, transformers, electron tubes, tube sockets, tuning units, choke coils, and wire and cable for radio sets and apparatus. Claims use since Feb. 7, 1931.

- Ser. No. 316,393. Westinghouse Electric and Manufactuting Company, East Pittsburgh, Pa. Filed June 27, 1931. ""COLUMETTE"" for Radio Receiving Sets. Claims use since April 20, 1931.
- Ser. No. 316,541. The Revere Radio Corporation, Mansfield, Ohio. Filed June 1, 1931. "REVERE" for Radio Broadcast Receiving Sets. Claims use since March 2, 1931.

Trade-Mark Registrations Granted

- 286,129. Electron Emissive Tubes and Parts Thereof. Arcturus Radio Tube Company, Newark, N. J. Filed March 28, 1931. Published June 2, 1931.
- 286,146. Electrical Vacuum Tubes and Valves. CeCo Manufacturing Company, Inc., doing business as Argus Radio Tube Co., Providence, R. I. Filed April 22, 1931. Published June 2, 1931.
- 286,171. Talking Machine Needles. Drei-S-Werk Schwabacher Spinnereinadel-U. StahlspitzenWerk Fr. Reingruber, Schwabach, Bavaria, Germany. Filed December 23, 1930. Published May 26, 1931.
- 286,174. Radio Electron Tubes. National Union Radio Corporation, Newark, N. J. Filed February 18, 1931. Published June 2,1931.
- 286,193. Electric Lamps, Glow Tubes and Electron and Space Discharge Tubes. DeForest Radio Company, Passaic, N. J. Filed March 3, 1930. Published June 2, 1931.

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