

# HEINL RADIO BUSINESS LETTER

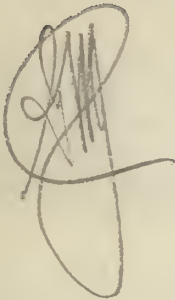
INSURANCE BUILDING

WASHINGTON, D. C.

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 :: :: **CONFIDENTIAL—NOT FOR PUBLICATION.** :: ::

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No. 448

## PATENT POOL AND END OF U.S. SUIT LOOM

Creation of an open patent pool in the radio industry and the entering of a consent decree in the anti-trust suit brought by the Department of Justice against the Radio Corporation of America are expected to result from a series of conferences, held secretly for the last several months and to be resumed in September.

Should the open patent pool be agreed to definitely next fall, the Radio Corporation will escape not only the Department of Justice prosecution but also probably the chief attack that the Radio Protective Association had contemplated instigating in Congress next winter on account of the Radio Commission decision, Oswald F. Schuette, executive secretary, declared that this breaking up of the so-called patent monopoly is what the radio independents have been fighting for four years.

Judge Warren Olney, jr., special assistant to the Attorney General in the RCA case, said that the Department of Justice suit would be dropped if the negotiations are successfully concluded.

The proposed pool is understood to be somewhat similar to the automobile pool save that royalties will be retained for the protection of the inventors and sponsors in the radio industry set-up.

The full text of the statement issued this week by the Department of Justice follows:

"It was stated today (July 1) that conferences have been going on for some time between the Department of Justice and the principal defendants in the anti-trust suit brought by the Government against the Radio Corporation of America, General Electric Company, Westinghouse Electric & Manufacturing Company, American Telephone & Telegraph Company and certain other companies.

"The Radio Corporation of America was originally formed by the General Electric Company to acquire the American Marconi Company, which was a British-owned company, owned the Marconi patents and was the principal factor in the wireless communication field in America. In the view of the Department there was nothing illegal in this, but almost immediately upon the formation of the Radio Corporation, there began the making of a series of contracts between the defendants as to the use of their respective patents in the radio and allied fields.



"In the view of the Department, these agreements in a number of their important provisions were illegal as designed to prevent and suppress competition between the parties. It should be said that the defendants deny wholly that the agreements made by them were illegal or had the purpose or effect charged by the Government.

"It developed at the conferences, however, that regardless of the legality or illegality of their contracts the principal defendants were ready to change them so as to make them unobjectionable in the view of the Department. It also appeared that the principal defendants would, in addition, consider favorably creating an open patent pool, whereby the use of their patents in the radio and certain allied fields would be open to the public generally upon fair and reasonable terms to be fixed by independent trustees.

"Such a pool would, in the opinion of the Department, if practicable, be of distinct advantage to the public both as opening the patents of the particular defendants to general use and also as serving as the beginning of an open patent pool into which all patents important in the radio field might be brought and their use made open to the public on terms fair and reasonable to patent owners on the one side and the industry on the other and the industry be largely relieved of interminable and expensive disputes over patent rights. In the consideration of these matters the Department has kept in close touch with the representatives of the independents in the radio industry and the creation of such a patent pool is one of the proposals advanced by them as a possible solution.

"The creation of such a pool is a matter that requires careful consideration both as to detail and as to its effect upon the industry in order to determine both its desirability and its practicability, and there has been no definite commitment as yet either by the Department or by the defendants in regard to it. They have agreed, however, that the creation of such a pool warrants earnest consideration and that the parties will genuinely endeavor to formulate an acceptable plan embodying it.

"In order to permit the further consideration by both sides of this proposal for an open patent pool, the conferences have been adjourned until September, when they are to be resumed and pursued without interruption to a conclusion."

Immediately afterward Mr. Schuette issued a statement, which follows, in part:

"Attorney General Mitchell's announcement of the surrender of the radio trust is the decisive victory for which the independent radio industry has been fighting for four years.

"The willingness of the Radio Corporation of America, the General Electric company, the Westinghouse Electric and Manufacturing company and the American Telephone and Telegraph Company to change the patent agreements which created the radio trust 'so as to make them unobjectionable in the view of the Department of Justice' will end the patent racketeering which has been the chief complaint of the independent industry.

"It will also mean the end of the exclusive traffic agreements by which the radio trust has been able to keep independent competitors off the air, as well as of other illegal practices which have figured in its efforts to monopolize radio.

"But all this cannot recompense the independent industry or the public for the injury which has been done, and it would therefore be no warrant for a cessation of the Government's warfare against the trust, even though it might require three years more of fighting to win the final dissolution of the trust in the courts."

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#### MACKAY OPENS NEWARK PLANTS.

Clarence H. Mackay, president of the Mackay Radio and Telegraph Company, announced today that the two Newark factories now controlled by his company have been reopened and a considerable number of new employees will be engaged between now and September. These factories have been closed down for a short period, and were formerly operated by the Kolster Radio Corporation. The majority of this additional personnel, said Mr. Mackay, will be directly engaged in the manufacture of the new Kolster International Radio Broadcast Receiver, which will be placed on the market early in August.

Trade response in the United States, South America, and abroad was credited for this aggressive move.

A large part of the personnel will be engaged in the manufacturing of the Kolster radio compass and radiotelegraph communication equipment, not only for the international system but for installation on American merchant ships, which comprises the Mackay radio marine services.

A separate department will be maintained for the manufacture of high powered vacuum tubes for transmitting purposes.

In addition to the manufacturing division, a laboratory is being established in Newark, which will soon employ a large corps of engineers who will engage in development and research work in all branches of the radio art, and who will work closely with the laboratories of International Communications Laboratories.

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## SHORT WAVE CORPORATION PLAN APPROVED

An international exchange of radio programs, affecting about 100 independent broadcasting stations in this country, will be inaugurated shortly as a result of the approval of the plan of the Short Wave Broadcasting Corporation, of New York, by the Federal Radio Commission.

Good will between the United States and remote nations of the world, as well as establishment of markets for American short wave receivers, is one of the chief aims of sponsors of the enterprise. Arrangements have already been made to rebroadcast programs throughout Latin America, it is said, and negotiations are under way for the rebroadcast of programs in Japan and China.

The Aviation Radio Station, Inc., of New York, is joined with the Short Wave company in the undertaking. The first operates the broadcasting station WRNY, while the second has the short wave station W2XAL. The Short Wave Corporation also operates a television station and is engaged in the manufacture of both television and short wave receiving sets.

The Italian Embassy has informed the Radio Commission that it is interested in the interchange of programs between Italy and this country. Negotiations for this exchange have already been started.

Preliminary arrangements have been made to rebroadcast American programs in Chile, Peru, Brazil, Bolivia, Argentina, Cuba and Mexico through the medium of ten centrally located stations.

The project is financed by certain aviation interests in this country and abroad. Among the backers are C. W. Cuthell, James C. Wilson, and C. M. Keys.

While more programs will probably originate in this country than abroad, enough programs will be rebroadcast in the United States to give Americans an idea of radio entertainment in some of the more remote foreign nations. The undertaking will be non-commercial because of regulations of the Radio Commission although foreign markets will likely be opened for short wave receivers.

Chief Examiner Ellis A. Yost, in his report to the Radio Commission on four applications having to do with the project, recommended that they all be granted. The applications were for renewal of license of Station W2XAL; for an increase in the power of the station from 500 to 15,000 watts, with the completion date extended to July 1, 1932; for assignment of the license of the station from Aviation Radio Station to the new corporation and for similar assignment of the construction permit for the new transmitter of increased output to the Short Wave Broadcasting Company.

Mr. Yost's conclusions, which were sustained by the Commission, are as follows:

1. The applicant has been diligently occupied in the conduct of experimental work in connection with short wave or high frequency broadcast.

2. It has used its best efforts to insure the rebroadcast of its programs in foreign countries.

3. The proposed assignee, Short Wave Broadcasting Corporation, is financially sound and is peculiarly suited for the conduct of short wave broadcasting (a) through its connection with the Short Wave and Television Corporation, whose valuable technical assistance and advice will be available to it, and (b) by being a subsidiary of Aviation Radio Station, Inc., the sponsors of which have valuable connections in the United States and throughout the entire world, which will be available to the assignee.

4. There is a need for a short wave broadcasting station independent of the large chains.

5. The frequencies in question are registered at Berne for use by W2XAL and it is therefore important that these registrations be kept intact and that W2XAL continue its experimental operation and development thereon.

6. The applicant is seriously engaged in improving the technic of the art of relay broadcasting.

7. The Short Wave Broadcasting Corporation has laid out an extensive experimental program of research for relay broadcasting.

8. The operation of this station by the applicant and its proposed operation by the Short Wave Broadcasting Corporation has been and is in the interests of public convenience and necessity.

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#### REQUEST FOR NEW YORK CITY TELEVISION STATION

A new television station for New York City, designed to operate in the ultra high frequencies as well as in the regular experimental channels, is awaiting the sanction of the Federal Radio Commission. The application was filed by the Easton Coil Company, Inc., of New York City. Power of 500 watts is requested.

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## NEW SUIT FILED AGAINST RCA

A bill of complaint alleging that the Radio Corporation of America has assumed managing control of a patents pool was filed in the Federal Court at Wilmington, Del., Tuesday, by the Poughkeepsie (N.Y.) Gold Seal Electric Corporation.

The bill alleges that the corporation has entered into a conspiracy with the Western Electric Company, United Fruit Company, General Electric Company and American Telephone and Telegraph Company to monopolize the manufacture of radio sets and to lessen competition in interstate and foreign commerce.

The Court is asked to enjoin the Radio Corporation from utilizing any of the patents or other rights of the individual members of the alleged combination and also from continuing managing control of the combination.

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## RADIO CONTROL IN CANADIAN PARLIAMENT

The following Canadian Press story from Ottawa appeared in the Wednesday New York Times:

"Control of radio broadcasting in Canada belongs to the Dominion Parliament and not to the Provincial Legislatures.

"This was the decision of a majority of the judges of the Supreme Court in Canada, handed down today in the radio reference.

"In dissenting judgments, Justices Rinfret and Lamont took the stand that the Provinces were entitled to a measure of control, particularly over radio receiving.

"The case turned on the construction of the British North America act. It was brought about by the action of the Province of Quebec, which contested the Dominion's claim to complete legislative control over radio. At the hearing, the Provinces of Ontario and New Brunswick actively supported the claims of Quebec, and other Provinces held watching briefs.

"An appeal is likely to be made from this decision to the Judicial Committee of the Privy Council.

"The court's decision is expected to have an important bearing on the proposed scheme of nationalizing radio broadcasting in Canada, as recommended last year by the Royal Commission headed by Sir John Aird. Should the present decision be confirmed by the Privy Council, nothing would stand in the way of such nationalization."

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## NAVY CLOSES SIX COMPASS STATIONS

The Navy Department announced recently the discontinuance of six radio direction finder stations, effective October 1st, at Cape May, N. J.; Thatcher's Island, Mass.; Poyner's Hill, N. C.; North Island, S. C.; Point Huoneme, Cal., and Fort Stevens, Ore.

The abandonment of these stations will mean the saving of about \$57,000 annually.

One minute saved in the transmission of each dispatch handled by the naval shore communication service during the fiscal year ended recently, would have meant a time saving of seven years, according to the Naval Communications Service, Captain S. C. Hooper, Director of Naval Communications, declared.

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## NEW AIRCRAFT RADIO DESIGNED FOR "AKRON"

Specially-designed radio equipment, comprising the most powerful apparatus constructed for aircraft work, will be installed in the new naval airship "Akron", the Bureau of Aeronautics, Department of the Navy, has announced.

The apparatus which will be employed weighs only 1,000 pounds, the maximum weight having been reduced 400 pounds below the maximum allowed in specifications, the announcement said. The announcement follows in full text:

When the U.S.S. "Akron" Navy dirigible, is completed, her radio equipment will be the most powerful installed in aircraft as well as the lightest in weight and the smallest in size for its power.

When bids for the manufacture of the "Akron's" radio equipment were advertised, the Navy specified that the maximum weight allowance was 1,400 pounds and offered a bonus for every pound below that weight, and for speed in delivery. The Westinghouse Electric Manufacturing Company was awarded the contract, and by design, attention to details, and the use of light materials, brought the weight of the "Akron's" radio equipment down to 1,000 pounds.

The specifications for the "Akron's" radio equipment were prepared by the Navy from its experience with radio equipment aboard the U.S.S. "Los Angeles."

The "Akron" will have a high frequency, an intermediate frequency, and a direction finding receiving set. Two trailing, reel-up type antennas will be installed in the new ship, one 500 ft. long, weighted by a 20-pound "fish", and the other 150 feet long, with a 15-pound "fish". In addition, a fixed wire antenna will run along a longitudinal girder at the turn of the bilge and will be secured between short struts extending out from the hull of the airship, the location eliminating the possibility of this antenna being fouled during landing and handling operations.

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## FREQUENCY TESTS GAIN IN ACCURACY

Errors of less than one part in a million in the standard frequency radio signals transmitted by National Bureau of Standards as an aid in testing laboratories, manufacturers or transmitting stations in checking their frequency standards, indicate the increasing degree of accuracy of this service, according to Director George K. Burgess.

The bureau of Standards has provided standard-frequency radio signals at scheduled times throughout the past eight years.

During the present year, the service includes transmission every Tuesday for two hours in the afternoon and two hours in the evening. Errors in the frequency of the transmission are now considerably less than one part in a million. Plans have been made for still further improving the services by increasing the power and adding more frequencies, so that the signals will be available for reliable reception everywhere in the United States. In addition, it is expected that they will be transmitted for several hours each day. It is expected that the accuracy of the frequencies transmitted will be within one part in 10 million. The Bureau's program contemplates extending the service until it is available everywhere at all times.

The standard frequency signals will be available for the checking of frequency standards anywhere in the country by testing laboratories, manufacturers, or transmitting stations. The availability of this means of direct checking is expected to aid materially in the accurate maintenance of transmitted station frequencies and thus contribute to the reduction of radio interference.

Eventually the service may be put on the air continuously 24 hours every day. If this project comes to fruition, stations may be directly controlled by the received standard frequency signals. This will permit putting all of the stations of the country on a single frequency control. It will make more practicable the synchronizing of broadcasting stations so as to permit multiple operation of such station on a single frequency.

Ample tests have shown that the frequencies are constant to the accuracies stated for short as well as long-time intervals. Since frequency is the reciprocal of time these transmissions thus give a time duration service as well as a frequency service, that is, scientific observers, jewelers, and others interested in extremely accurate short intervals of time can utilize these signals for their purposes. The signals will not in any sense give the same information as actual time signals, but will give accurate time intervals or rates.

A number of additional services will be available from these standard frequency transmissions. It is expected to put one or more modulation frequencies on the high frequency carriers transmitted. An audio frequency will be useful for radio purposes and physical measurements, and may also serve as a synchronizing frequency for television transmission and reception.

Consideration is being given to placing a 60-cycle modulation on the transmissions with a view to aiding electric power systems in accurate synchronization in order to advance the interconnection of electric power supply systems in various parts of the country, and also to improve the accuracy of electric clocks. The waves transmitted will also be valuable for reception measurements by scientists and laboratories interested in the phenomena of wave transmission. It is thus expected to have the signals serve as the basis of cooperative research on radio wave phenomena.

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### JOLLIFFE RETURNS; LAUDS U. S. RADIO

Just returned from a European trip, Dr. C. B. Jolliffe, Chief Engineer of the Federal Radio Commission, is more confident than ever that the radio industry in the United States is superior to that abroad both in technique and programs. He was a delegate to the International Technical Consulting Committee on Communications meeting in Copenhagen.

Explaining that the problem of broadcasting in Europe is inherently more difficult than in this country, Dr. Jolliffe added that "rather loose methods are employed" abroad. Moreover, he said: "The choice of programs is limited and the entertainment has not been adapted to the split-second radio schedule manifest here."

Receiving sets used in Europe are inferior to those employed in America, he said, and a greater amount of interference results because of the 9-kilocycle separation between channels as against the 10-kilocycles required in this country.

Discussions at Copenhagen were almost altogether technical and dealt with engineering developments, ship-to-shore telephone communication, and such problems rather than broadcasting, which was not considered officially.

Other members of the United States delegation were: Senator-elect Wallace White, of Maine, Chairman, and Dr. J. H. Dellinger, Chief of the Radio Section, Bureau of Standards. Technical advisers were: Dr. Irvin Stewart, Department of State; Dr. C. C. McIlwraith, Bureau of Standards; Gerald C. Gross, Radio Commission; Lieut. Commdr. E. M. Webster, Coast Guard; Lieut. Commdr. J. R. Redman, Navy; and Lieuts. W. T. Guest and T. H. Maddocks, Army.

Maj. K. B. Warner, Secretary of the American Radio Relay League, was a Special Advisor, and Vinton Chapin, State Department, served as Secretary.

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## TELEVISION DEMONSTRATION IN WASHINGTON

Television images projected on a motion picture screen six feet square were exhibited at the Mayflower Hotel in Washington this week by the Sanabria Television Corporation of New York City. Numerous Federal officials, radio engineers, and newspaper representatives were present.

The pictures were transmitted by wire, first to a small screen and then to the large, from both photographs and living images. Ulises A. Sanabria, of Chicago, inventor of the system, conducted the exhibition.

Several of the guests went before the microphone and were televised clearly enough to be easily recognizable to the audience. Among these were Col. Thad Brown, General Counsel of the Radio Commission; Lieut. E. K. Jett, engineer of the Commission; and Frank L. Morrison, Secretary of the Aermican Federation of Labor.

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### APPLICATIONS RECEIVED BY FEDERAL RADIO COMMISSION

July 1 - WHAS, Louisville Times Co., and The Courier-Journal Co., Louisville, Ky., C. P. for changes in equipment; Dr. F. P. Cerniglia, Harrison & Jackson St.,s Monroe, La., C. P. resubmitted and amended to request 1310 kc., sharing time with Station KRMD (facilities of Station KTSL) instead of 1500 kc., and unlimited time; WMT, Waterloo Broadcasting Co., Waterloo, Iowa., direct measurement of antenna input; WREN, Jenny Wren Co., Lawrence, Kans., C. P. to move transmitter from Lawrence, Kans., to "South of Tonganoxie, Kans."

### Applications Other Than Broadcasting

June 27 - Aeronautical Radio, Inc.: KFM, Sacramento, Calif., and KQX, Bakersfield, Calif., license covering C. P. for 3160, 3166, 3172, 3178, 5570, 5660 kc., 400 watts; Easton Coil Co., Inc., New York, N. Y., new C. P. for 2750 to 2850, 43000 to 46000, 48500 to 50300, 60000 to 80000 kc., 500 watts, visual broadcasting service; WOA, Pan American Airways, Inc., New York, N. Y., modification of license for temporary authorization to communicate with Plane NR-211, and additional frequencies of 12210, 8015 kc.

July 1 - W2XAV, Bell Telephone Laboratories, Inc., Ocean Township, N. J., Portable, renewal of special experimental license for 17300, 18310 kc., 100 watts & 5 watts; KIP, American Radio News Corp., S. San Francisco, Calif., modification of C. P. for extension of C. period from 8/1/31 to 11/30/31 and change in equipment; WSDE, Aeronautical Radio, Inc., Birmingham, Ala., license covering C. P. for 3484, 5630 kc., 400 watts, aeronautical service; Atlantic Broadcasting Corp., portables, (4) initial location, 485 Madison Ave. New York City, new C. P.s for 1544, 2476 kc., temporary broadcast pickup service, 2 for 50 watts, 2 for 1 watt; WPDx, City of Detroit, Police Dept., Detroit, Mich., C. P. for 2410 kc., 50 watts, police service (for change in transmitter).

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## PATENTS, PATENT SUIT, AND DESIGNS GRANTED

The following patents were granted during the week ending June 30, 1931:

- 1,811,839. Sound Transmission. Harold D. Arnold, Summit, N. J., assignor to Bell Telephone Laboratories, Inc., New York, N. Y. Filed June 14, 1929.
- 1,811,841. Sound Reproducing System. John C. Benjamin, New York, N. Y., assignor to Bell Telephone Laboratories, Inc., New York, N. Y. Filed July 13, 1928.
- 1,811,856. Switching Device for Radio and Phonograph Combinations. Maurice B. Long, Glen Ridge, N. J., assignor to Western Electric Company, Inc., New York, N. Y. Original application filed October 1, 1926, Divided and this application filed May 26, 1927.
- 1,811,858. Control System for Transmission of Signals. Ohmer R. Miller, Floral Park, N. Y., assignor to Bell Telephone Laboratories, Inc., New York, N. Y. Filed April 30, 1929.
- 1,811,861. Illuminating Apparatus. Alexander Nyman, Dobbs Ferry, N. Y., assignor to Radio Patents Corporation, New York, N. Y. Filed October 20, 1926.
- 1,811,895. Light Control System. Richard Howland Ranger, Newark, N. J., assignor to Radio Corporation of America. Filed October 31, 1928.
- 1,811,905. Means To Control Cross Talk. Herman A. Affel, Ridgewood, N. J., and Allen Carpe, New York, N. Y., assignors to American Telephone and Telegraph Co. Filed June 26, 1928.
- 1,811,915. Means to Control Cross Talk. Allen Carpe, New York, N. Y., assignor to American Telephone and Telegraph Company. Filed June 26, 1928.
- 1,811,941. Apparatus for Reducing Disturbing Currents. Clyde R. Keith, East Orange, N. J., assignor to Bell Telephone Laboratories, Inc., New York, N. Y. Filed June 20, 1928.
- 1,811,985. Sound Resonating and Amplifying Device. Christian A. Volf, Jr., Weehawken, N. J., assignor to Murray T. Quigg, New York County, N. Y. Filed December 1, 1928.
- 1,812,066. Electric Detector and Frequency Changing System. Frederick Emmons Terman, Stanford University, Calif. Filed March 7, 1927.



- 1,812,103. Electron Emitting Device and Method of Making. Duncan McRae, East Orange, N. J., assignor to Westinghouse Lamp Co., Filed September 11, 1922.
- 1,812,114. Cheek Microphone. Ernst Nolke, Berlin Halensee, Germany, assignor to Siemens & Halske Aktiengesellschaft, Wernerwerk Siemensstadt, near Berlin, Germany. Filed September 23, 1929, and in Germany January 22, 1929.
- 1,812,169. Selective Program Service System. Winfred T. Powell, Rochester, N. Y., assignor to Stromberg-Carlson Telephone Co., Rochester, N. Y. Filed February 19, 1929.
- 1,812,213. Loud Speaker. John P. Minton, White Plains, N. Y., assignor, by mesne assignments, to United Reproducers Corporation, Rochester, N. Y. Filed March 30, 1927.
- 1,812,219. Sound Reproduction. Lewis I. Reed, Berkeley, Calif. Filed October 2, 1928.

- 1,812,303. Sound Reproducing Means. Freeman H. Owens, New York, N.Y. assigns to Owens Development Corporation, New York, N.Y. Filed April 23, 1929.
- 1,812,389. Acoustic Device. Edward C. Wente, New York, N. Y., assignor, by mesne assignments, to Western Electric Co., Inc., Filed April 1, 1925; renewed Sept. 11, 1930.
- 1,812,402. Electrooptical Transmission System. Frank Gray, New York, N. Y., assignor to Bell Telephone Laboratories, Inc., New York, N. Y. Filed September 30, 1929.
- 1,812,405. Electrooptical Transmission System. Herbert E. Ives, Montclair, N. J., assignor to Bell Telephone Laboratories, Inc., New York, N. Y. Filed May 25, 1929.
- 1,812,407. Radio Apparatus. August J. Kloneck, New York, N. Y. Filed June 5, 1923.
- 1,812,449. Synchronized Sound and Photography. Harrison W. Rogers, New York, N. Y. Filed October 31, 1928.
- 1,812,454. Phonograph. Jack Potter Stockton, Spring Lake, N. J., assignor to Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y. Filed June 14, 1928.
- 1,812,489. Electron Tube. Albert Kruger, Berlin, Germany, assignor to Siemens-Schuckertwerke Aktiengesellschaft, Berlin-Siemensstadt, Germany. Filed January 26, 1928, and in Germany, January 31, 1927.

- 1,812,525. Radio Tuning Mechanism. Winslow Goodwin, Chicago, Ill., assignor to Crow Name Plate & Manufacturing Co., Chicago, Ill. Filed October 11, 1930.
- 1,812,545. Electromagnetic Relay. Carl Erik Jean Nilson, Stockholm, Sweden, assignor to Telefonaktiebolaget L.M. Ericsson, Stockholm, Sweden, Filed August 22, 1929, and in Sweden, August 24, 1928.
- 1,812,550. Phonograph Disk. Armando Alvares Penteado, Paris, France. Filed July 8, 1929, and in France June 12, 1929.
- 1,812,558. Vacuum Tube Device. James Robert Robertson, London, England, Filed January 11, 1928, and in Great Britain, January 22, 1927.
- 1,812,570. Multiplex Transmitter. William P. Stunz, Lansdowne, Md., assignor to Safe Deposit and Trust Co., of Baltimore, Md., as trustee under the will of George R. Webb. Filed January 6, 1928.
- 1,812,571. Telephonic Instrument. William P. Stunz, Lansdowne, Md., assignor to Safe Deposit and Trust Company, Baltimore, Md. Filed May 9, 1928.
- 1,812,619. Sound Reproduction. David G. Blattner, Bogota, N. J., assignor to Bell Telephone Laboratories, Inc., New York, N. Y. Filed February 24, 1928.
- 1,812,634. Sound Reproducer. Warren C. Jones, Flushing, N. Y., assignor to Bell Telephone Laboratories, Inc., New York, N. Y. Filed June 23, 1928.
- 1,812,664. Electrical Condenser and Method of Making It. William H. Friess, Montclair, N. J., assignor to Wireless Specialty Apparatus Co., Boston, Mass. Original application filed December 5, 1921. Divided and this application filed December 5, 1923.
- 1,812,695. Loop Aerial. Albert G. Harms, Chicago, Ill. Filed April 12, 1926.
- 1,812,713. Electrical Condenser. John A. Proctor, Lexington and William M. Bailey, Lynn, Mass., assignors to Wireless Specialty Apparatus Co., Boston, Mass. Filed January 23, 1925.
- 1,812,751. Phonograph Record. Charles J. Mensman, Washington, D.C., Original application filed April 24, 1923. Divided and this application filed November 19, 1927.
- 1,812,763. Photo-Electric Device. William E. Story, Jr., Worcester, Mass., assignor to General Electric Co. Filed April 6, 1925. Renewed December 17, 1929.



- 1,812,764. Photo-Electric Device. William E. Story, Jr., Worcester, Mass., assignor to General Electric Co. Original application filed April 6, 1925. Divided and this application filed April 25, 1929.
- 1,812,828. Switch Or Commutating Means. Frank Gray, New York, N. Y., assignor to Bell Telephone Laboratories, Inc., New York, Filed October 18, 1928.

#### Adverse Decision In Interference

- Pat. 1,689,564. Fletcher Thorington, Means for the radio-translation of phonographically recorded sound waves, decided June 11, 1931, claims 2 and 3, (in interferences involving the indicated claims of the following patents final decisions have been rendered that the respective patentees were not the first inventors with respect to the claims listed).

#### Patent Suit

- 1,545,207, 1,617,179, 1,617,180, C. G. Smith, Electrical apparatus; 1,617,171, same, Method and apparatus for the rectification of alternating currents; 1,617,172, 1,617,177, same, Production of electrical variations; 1,617,174, same, Electrical apparatus and method; 1,617,179, 1,617,181, V. Bush, Electrical apparatus, filed April 22, 1931, D. C., Mass., Doc. E 3419, Raytheon, Inc., et al. v. Selectron Corp. et al.

#### Designs

- 84,505. Radio Cabinet. Albert Aurilli, Lake Worth, Fla. Filed December 26, 1930. Term of patent  $3\frac{1}{2}$  years.
- 84,530. Radio Cabinet. Raymond Loewy, New York, N. Y., assignor to Westinghouse Electric & Manufacturing Co. Filed March 7, 1931. Term of patent 14 years.
- 84,540. Radio Cabinet Or Similar Article. George J. Pike, Grand Rapids, Mich., assignor to General Motors Radio Corporation, Dayton, Ohio. Filed May 8, 1931. Term of patent 7 years for all with the exception of 84,543 which is for  $3\frac{1}{2}$  years.
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