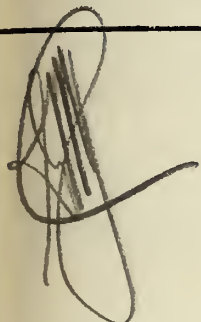


# HEINL RADIO BUSINESS LETTER

INSURANCE BUILDING

WASHINGTON, D. C.

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 :: :: **CONFIDENTIAL—NOT FOR PUBLICATION.** :: ::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. 442.

National Broadcasting Company, Inc.  
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## INJUNCTION DECISION FRIDAY

The Supreme Court of the District of Columbia will hand down a decision on the request of the Radio Corporation of America and its subsidiaries for an injunction restraining the Commission from denying licenses, under Section 13 of the Federal Radio Act, tomorrow (Friday) morning at 10 A. M.

The legal counsel of the Radio Corporation and its subsidiaries have declared they will seek no postponement of the Commission's hearings set for Monday morning, June 15th.

\* \* \* \* \*

Arguments were heard yesterday and today from Duke M. Patrick, Assistant General Counsel of the Federal Radio Commission, and Louis Titus, counsel for RCA.

The spirit, if not the letter of the anti-monopoly provisions of the Radio Act of 1927, has been violated by the Radio Corporation of America, justifying action by the Federal Radio Commission to ascertain whether these provisions require it to refuse renewal of more than 1,400 radio licenses held by RCA subsidiaries, Mr. Patrick declared.

Answering contentions of counsel for RCA, that the provisions of the Radio Act were not applicable, and that the Commission should be prevented from holding a hearing scheduled for June 15th, Mr. Patrick said that the debates in Congress at the time the legislation was before it show conclusively that the provisions apply to the RCA case.

The Commission, Mr. Patrick said, is entirely within its administrative rights by calling the proposed hearing.

The Commission, through its action, is holding a sword over our heads", said Mr. Titus in his plea for injunction.

"The order of the Commission", he added, has been published broadcast throughout the country. Our customers have been warned that these companies may not continue in business and the company has suffered irreparable injury because of the notice of the hearing.

The provision which holds in abeyance action on new licenses, Mr. Titus said, is disturbing because the RCA today is negotiating for the establishment of a new foreign service, but can not proceed because it can acquire no new facilities. In the Great Lakes area a project of RCA Communications is being blocked for the same reason, while radio stations maintained by Radiomarine aboard hundreds of ships plying the seas also are in jeopardy, he declared.

Competitors of the RCA, said Mr. Titus, are using these conditions to acquire additional business.

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## RESULTS OF SURVEY BY RADIO EDITORS

Replies of 63 radio editors out of a total of 200 solicited in questionnaires sent out by a special committee of the Newspaper Radio Editors' Association, reveal some of the following views:

Twenty-seven radio editors do not use trade names in programs; the remainder carried them in limited or varying degrees.

Only one admitted charging advertising rates for program listings.

Programs were shown to occupy from six inches to three columns daily, while radio news varied from nothing to three columns daily. Program news was by far predominant.

Fifty-five said their papers got spotlight program advertising; from "very little" to "growing." The majority declared that this advertising did not compensate for the amount of space devoted to programs and publicity.

The four sponsored network programs which were called "the best examples of good taste in their commercial appeal" are, in order: Atwater Kent. Colliers Hour, General Electric and A. & P. Gypsies.

Only about half of the editors answered the question regarding the programs which "show the least display of good taste in their commercial appeal." In these answers Lucky Strike received by far the majority of votes, while Cremo, Edna Wallace Hopper and Pepsodent followed in order.

With a few exceptions, all of the editors favor the American plan of broadcasting as opposed to the European.

Suggestions as to the "maximum amount of time which should be devoted to advertising per hour program" varied from 20 words to from 2 to 10 per cent of the program's duration.

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## NEW TYPE OF AIR RADIO SET IS TESTED

Radio telephone communication was maintained among three planes in flight and a ground station at Wright Field, Dayton, Ohio, during recent tests of a new type of aviation radio set designed for use in commanding pursuit squadrons, according to announcement by the Army Air Corps.

The low-powered set of light weight, developed by the Western Electric Company, "far exceeded expectations", it was said, as conversation was heard for a distance of 100 miles, whereas it had been hoped that reliable communication could be carried on for only 15 miles.

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## PERRY RAPS EDUCATIONAL BLOCK

The Federal Radio Commission was criticized for its failure to distinguish between commercial broadcasting stations and educational stations in allocating radio channels by Armstrong Perry, Specialist in Education by Radio of the United States Office of Education, in an address Tuesday before the annual Institute of Education by Radio at Columbus, Ohio.

Charging that the Commission had not interpreted the radio law as Congress had intended, Mr. Perry said that commercial stations operated for amusement and advertising now control 94.5 per cent of the available frequencies.

The speaker admitted that broadcasters have been generous in their offers of time on the air to educators and educational institutions, but he added that they have fought every attempt of educational interests to reserve any radio channels.

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## DON LEE'S NEW TELEVISION DEVICE APPROVED

A new type of television transmission apparatus has been approved and recommended for an experimental license by Examiner Ralph L. Walker in a report to the Federal Radio Commission upon the application of Don Lee, Inc., of Los Angeles. The station will employ an electrical rather than a mechanical system of scanning.

Any developments that the applicant may make in this field will be valuable to the advancement of television, the Examiner holds. The report also points out that Don Lee, Inc., has a technical staff well equipped to conduct the experiments as he now operates two broadcasting stations, KHJ, Los Angeles, and KFRC, San Francisco, and a visual broadcasting station, W6XK, at Los Angeles.

The application is for an assignment of 500 watts power unlimited time on the television channels of 2100 to 2200 and 2850 to 2950 kilocycle bands. Mr. Walker recommends that the application be granted for the former frequency "subject to such regulations as now exist or may hereafter be promulgated concerning experimental television stations."

That portion of the Examiner's report relating to the new type of television system follows in full text:

"The system of television broadcasting which the applicant proposes to use differs from the usual television system in that it does not employ scanning disks or other rotating devices, being an electrical system of scanning rather than a mechanical system.

"In the proposed apparatus, motion picture film is moved uniformly through a modified projector to provide the image for transmission. Simultaneously with this motion, and in a direction



transverse to it, a beam of light is vibrated across the film, according to a peaked waveshape of energy, by an oscillograph type of element. The light transmitted through the film impinges upon a photoelectric cell, producing current variations in it, which are amplified and modulated on to a radio frequency carrier in the usual manner.

"A peaked-wave scanning generator, a vacuum tube device, is used to excite the oscillograph element at a frequency of 1200 cycles per second, giving an image of 80 lines, which is repeated 15 times per second.

"The applicant believes that the peak scanning wave gives more useful detail in the received image than is usually secured when a fixed frequency spectrum, such as the 100 kilocycle channel, is used.

"The receiver employs a cathode-ray oscillograph tube for forming the image, instead of the customary scanning disk or drum. A peaked-wave generator identical to and operating in synchronism with that used at the transmitter, or peaked voltage waves sent over a line from the transmitter, are used at the receiver.

"A saw-tooth waveform low frequency vacuum-tube generator is used to provide the image repetition frequency of 15 cycles per second. A contact closing commutator located on the projector originates current pulses to be introduced into the image frequency channel, or transmitted to the receiver by wire, for the purpose of maintaining this generator in step."

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#### COMMISSION DECISIONS ON APPEALED CASES

Following are decisions of the Federal Radio Commission on cases appealed from reports of Examiners:

John B. Cooley (KLPM), of Minot, N. D., to change frequency and power; granted in part to use 1240 kilocycles with 250 watts power half-time.

New Haven Broadcasting Company, New Haven, Conn., for Construction permit, denied.

David R. Gray, Duncan, Okla., for construction permit, denied.

The Pioneer Broadcasting Company, of Greensburg, Pa., filed an appeal in the District Court of Appeals to a decision of the Commission denying its application for a construction permit.

R. P. Denman, Paris, Texas, for construction permit, denied.

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## RCA-VICTOR AD TALKS ARE CUT

Radio broadcast advertising must be brief to be effective, according to E. A. Nicholas, General Sales Manager of the RCA Victor Company.

"Under the existing system of American broadcasting commercial sponsorship is the logical answer to the question of 'Who shall pay for broadcasting', and the listening public realizes this", he said. "It recognizes that the commercial sponsor is entitled to some benefit in return for the high quality of entertainment he provides. But, the radio advertiser who so gluts his program with advertising that it becomes a source of annoyance to the listener automatically defeats his own purpose in sponsoring the program.

"Our own company has always made the newspapers the backbone of its advertising campaign. We look upon our weekly radio program more as a builder of public good will toward our radio products, rather than as a direct selling agent. Accordingly, we have limited the 'advertising talk' in the RCA Victor program to approximately fifteen seconds, at the beginning and at the end of the thirty-minute broadcast. This leaves all but thirty seconds or 1.67 percent of the half-hour, devoted to pure entertainment."

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## SLUMP DODGES RADIO INDUSTRY, SAYS KLEIN

Following, in part, is an address given Tuesday by Dr. Julius Klein, Assistant Secretary of Commerce, before the annual convention of Radio Manufacturers' Association at Chicago.

"World conditions of the last two years have signally failed to have any noticeable effect on the forward march of radio. People throughout the world are and have been buying radio equipment above the scale of past years, however prosperous they may have been.

"The number of sets in use is constantly increasing. The world total is now estimated at 26,000,000 to 30,000,000, and an increase of 250,000 monthly is maintained. Foreign countries are calling upon us for more and more radio equipment. Production and domestic sales are also moving forward with astonishing momentum.

"Radio exports have grown by leaps and bounds since the inception of broadcasting. From 1921 through 1930, radio apparatus to the value of \$99,580,680 left the United States for use in other lands. Nearly 50 per cent of this total was shipped in equal amounts during the peak-and-depression years of 1929 and 1930. But one decrease in radio exports is shown in any year since it has figured in our export statistics, and that in the midst of our greatest prosperity.



"The 1926 total was less than 1925 because 1925 was unusually high. But 1929 was practically double 1928, and the so-called "slump year" 1930 was just \$11,000 higher than the 1929 total of \$23,122,147. Early 1931 figures are exceeding those for the same months of the past two years or any previous year.

"The production of radio equipment as reported biennially by the Census of Manufactures continued to advance through 1929, and trade estimates indicate that this year will mark a further increase.

"From \$54,000,000 in 1923, the production jumped on successive biennial censuses to \$170,000,000 and \$183,000,000 and on to \$375,000,000 in 1929. According to trade indices, domestic sales have similarly increased.

"These are the records of the radio industry. One feels at first inclined to congratulate the industry, but rather than that I bear a gentle admonition. You, the radio industry, have ridden on the crest of the wave of popularity, which if I may speak frankly, was not entirely the result of your own creation.

"Radio as a truly amazing piece of scientific wizardry is a success, and you are its beneficiaries. The future beneficiaries will be those who recognize their business as an orderly, far-sighted business rather than a speculative venture with an extraordinary new art."

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#### ONLY MINOR ISSUES SETTLED AT COPENHAGEN

The following report of the International Radio meeting at Copenhagen was a special dispatch to the New York Times today:

"The International Radio Congress concluded its sessions Wednesday at Christiansborg Palace. Its deliberations have been secret and a statement released tonight indicates that only on eight minor points have conclusions been definitely reached.

"These relate to comparison of frequency standards, standardization of wave meters, reduction of disturbances within common wave bands, methods of annulling foreign currents in receivers further organization of commercial radio telephone services between movable and fixed stations, stabilization of senders' wave bands for various radio electrical services, recommendations regarding the latest developments of technique and, finally, reduction of radio disturbances in general.

"No fewer than fifteen important questions, including distribution of wave bands to various services, were referred to further examination by national committees. The question of distribution of wave bands occupied much of the time of the congress and was referred to further investigation by the British National Committee, which is collaborating with representatives of the United States.

"The congress was only consultative in character and is to make recommendations to the Madrid congress 1932. The results obtained in Copenhagen will, therefore, serve as a basis for the Madrid deliberations.

"The greatest problem - more effective utilization of the wave lengths and new distribution of services - unfortunately remains unsettled.

"The American delegation, which showed great activity throughout, will leave in a few days. One of the delegates, Dr. Charles Jolliffe, told your correspondent the American delegation had the satisfaction of seeing some of its technical recommendations adopted. The majority of the United States delegates will tour Europe before returning home. Wallace White leaves Tuesday for London and Dr. Jolliffe for Stockholm. Several of the others will sail June 18 on the George Washington.

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: NOTES FROM THE CHICAGO TRADE SHOW :  
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Morris Metcalf, President of the Radio Manufacturers' Association, in his annual message suggested three means of improving the industry:

1. Better advertising copy
2. A statistical barometer to curb over-production, and
3. The formation of a patent interchange agreement.

"Radio advertising, speaking generally, has been weak and futile", he said. "Ninety percent of it has been a jumble of technical phrases, catch words and superlatives, and might have been written in Sanskrit as far as the reading public was concerned.

"It has been estimated that the radio industry spends approximately \$30,000,000 annually advertising its products. Possibly \$100,000,000 has been spent in five years. I venture to say that half this amount spent collectively in an instructive and educational manner, and without competitive selling arguments, would have doubled the sales of radio sets and scrapped two-thirds of the 5,000,000 obsolete sets now in existence."

A radio patent interchange agreement was seen as a possibility by Mr. Metcalf, who said:

"It now seems possible that something resembling a patent pool may come into being as a result of the ownership of the important patents by one group or from legislation which will demand that the industry and the public be freed from the present burden of litigation. In the former case, one royalty would



cover everything, and the licensee would be comparatively free from litigation. We notice that some members of Congress now feel that perhaps a patent pool would be in the interest of the public good. Altogether, it is not impossible that the work done by the Association in this field may not have been entirely wasted."

As a means of curbing over-production, Mr. Metcalf suggested an accurate statistical barometer, dealing with production, sales and inventory, and a willingness on the part of manufacturers to be guided by this information.

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J. Clarke Coit was elected President of the Radio Manufacturers' Association, succeeding Morris Metcalf of Springfield, Mass. Mr. Coit is President of the United States Radio and Television Corporation in Chicago. Four new Vice-Presidents of the Association were elected - A. S. Wells, Leslie F. Muter, Fred D. Williams and N. P. Bloom.

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A treaty instead of a gentlemen's agreement to eliminate interference between radio stations on the North American continent was suggested by Walter J. Damm, Milwaukee, Wis., President of the National Association of Broadcasters, in an address delivered at the convention.

Mr. Damm also warned against the proposal being put forth by educators for 15 per cent of the broadcasting channels, characterizing such proposal as <sup>an</sup> entering wedge of government ownership and operation of all broadcasting stations.

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"Interference between stations of Mexico and Cuba and the United States has attracted the notice of the State Department, and it is likely that a new North American conference will be called before many more months elapse", he said.

"Canada, of course, would be a part of such a conference. Any agreement, however, should be made the subject of treaty and not be left simply to another 'gentlemen's agreement.'"

In pointing out that "no other country in the world is served by more efficient transmitting equipment", Mr. Damm said: "Unless you, as manufacturers, sell to the public receiving sets capable of deriving the maximum benefit from these transmission, you are not only failing in your duty to the public, but you are greatly injuring our business."

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Television on a six-foot screen was demonstrated by the Shortwave and Television Corporation of Boston, Wednesday in conjunction with Ulises A. Canabria, Chicago experimenter.

The frame, containing eight electric eyes of the caesium photoelectric cell variety, was located at one end of a long room. The persons televised could see themselves on the screen at the opposite end of the room.

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Sir John Reith, Director General of Radio in England, who is touring this country to study radio conditions, in an address at the Radio Manufacturers' Association convention said that his few weeks in America have convinced him that the radio system of the United States is not practical for England. And he believes that the American system would have a better chance with fewer stations and fewer commercially sponsored programs.

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How the radio industry can effect considerable savings in the cost of telegraphic communication after September 1st through the use of the telegraphic code, prepared by the radio and electrical industries, is outlined in a statement just issued by a joint industry committee.

The new telegraph code, both for radio and electrical uses has been developed after months of work by the RMA, NELA, NEMA, Radio Wholesalers' Association, Society for Electrical Development, and other interests. The new code is the first instance of the entire industries uniting on a general code and its success, of course, depends upon the scope of its adoption.

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Improvements incorporated in six new RCA Radiotrons announced to the public during the last two months make for better and more uniform set performance, according to R. S. Burnap, Commercial Engineer of the RCA Radiotron Company.

"In the light of the excellence of the receivers previously on the market", Mr. Burnap said, "the development of these new tubes - permitting still further improvements in set design - may be considered as a substantial contribution to the advancement of radio."

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The Columbia Broadcasting System will be on the air with an experimental series of television tests the latter part of this week, according to Edwin K. Cohan, technical director of the broadcasting company. Eight "Looking-In" posts in the Metropolitan area of New York have been created and will be in operation Friday. From these will come reports of pictures broadcast from Station W2XAB, short-wave CBS sight station.

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## APPLICATIONS RECEIVED BY FEDERAL RADIO COMMISSION

June 9 - Edward H. Bragg, Leslie F. Bragg, John C. Agnew and Albert H. Marshall, d/b as Plattsburgh Broadcasting Co., Plattsburgh, N. Y., C. P. amended to request 1370 kc., instead of 1310 kc., and to share day hours with WBGF instead of unlimited day; WORC-WEPS, Alfred Frank Kleindienst, Worcester, Mass., C. P. to install new transmitter and to increase power from 100 watts to 100 watts, 250 watts, L/S; Harold W. Bourlet, Lebanon, N. H., C. P. to erect new station to use 1050 kc., 5 watts and to operate from 8 to 10 A.M. Sundays; WOAX, WOAX, Inc., Trenton, N.J., C. P. to install new transmitter and to move studio from Trenton locally; WABC-WBOQ, Atlantic Broadcasting Corp., New York, N. Y., modification of license to use transmitter of Station WPCH at D.L. & W.R.R. Terminal, Hoboken, N. J., as an auxiliary transmitter on 860 kc., and 500 watts; KID, KID Broadcasting Co., Idaho Falls, Idaho, license to cover C. P. granted 4/24/31 for changes in equipment; KELW, Earl L. White, Burbank, Calif., voluntary assignment of license to Magnolia Park, Ltd.

### Applications Other Than Broadcasting

June 8 - WOA, Pan American Airways, Inc., North Beach, New York, N. Y., license for point-to-point aeronautical service on 2662, 4164, 6320 kc., 100 and 350 watts; Wayne County Airport, Wayne, Mich., new C. P. for 278 kc., 10 watts, aeronautical service; DeForest Radio Company, Portable, new C. P. for 45000-46000, 49400-50300, 70000-80000 kc., 500 watts, visual broadcasting; WQDQ, Aeronautical Radio, Inc., New Orleans, La., C. P. for new equipment on 3238, 3244, 3452, 3460, 3468, 3484, 5600, 5630, 2326, 4140, 6260, 6275 kc., 400 watts, aeronautical and point-to-point aeronautical service; KGIN, New England Fish Co., Chatham Cannery, Alaska, assignment of coastal and point-to-point license to R. R. Farish; KGIN, R. R. Farish, Chatham Cannery, Alaska, renewal of coastal and point-to-point license for 246, 220, 500, 460, 2320 kc., 250 watts; WAX, Tropical Radio Telegraph Co., Hialeah, Fla., license covering C. P. for 5525, 11050, 16580, 22100, 6665, 8490, 13180, 2280 kc., 350 watts, coastal service; also, license covering C. P. for 6770, 10450, 12940 kc., 350 watts, public point-to-point service.

June 9 - KHIBY, Universal Aviation Corporation, NC-805 E, modification of license for additional frequencies of 3106, 3238, 3244, 3452, 3460, 3484, 5600, 5630 kc., aircraft service; Radio Pictures: W2XR, Long Island City, N. Y., C. P. for new transmitter on 2100 to 2200 kc., 2850 to 2950 kc., 1 KW, experimental service; W2XAR, Long Island City, N. Y., C. P. for new transmitter on 1604, 2398 kc., 500 watts, experimental service; WPDH, City of Richmond, Ind., Police Department, Richmond, Ind., authorization to install automatic frequency control; W6XG, National Broadcasting Co., Inc., Oakland, Calif., renewal of experimental license for 790 kc., 10 KW, experimental service.

Also, Ford Motor Company: WFO, Dearborn, Mich., renewal of aeronautical license for 290, 389 or 393 kc., 1 KW; WCQ, Lansing, Ill., renewal of aeronautical license for 414, 278 kc., 1 KW; Universal Air Lines, Inc.: KHQCX, NC-880-E, and KHQDW, NC-881-E, modification of licenses for additional frequencies of 3106, 3238, 3244, 2352, 3460, 3484, 5600, 5630 kc., and change in description of transmitter; WAEA, Aeronautical Radio, Inc., Indianapolis, Ind., modification of license for correction in location of transmitter; KHILO, Crosley Radio Corporation, NR-496-M, license for 11050 kc., 7 watts (for emergency use on trans-Atlantic flight); WPP, Inland Waterways Corporation, Mobile, Ala., C. P. for new equipment on 3120, 6240 kc., and a channel in 5520 band, 250-500 watts, coastal and point-to-point service.

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### DECISIONS OF THE FEDERAL RADIO COMMISSION

On June 9th, the Commission granted the following applications:

KBPS, Benson Polytechnic School, Portland, Oregon, permission to suspend operation from June 12 to September 8, 1931; WISJ, Wisconsin State Journal Broadcasting Co., Madison, Wis., permission to operate for period of 1 week so as to allow the private interests of the Wisconsin State Journal Broadcasting Company to be taken care of and to allow time within which to complete the transfer of all its business to the Badger Broadcasting Company; KIT, Carl E. Haymond, Yakima, Wash., C. P. to install new equipment to conform to G. O. 111 and 115, increase maximum rated power output of equipment from 50 to 100 w. (does not increase licensed power); KFUM, The Reynolds Radio Co., Inc., Colorado Springs, Colo., C. P. to install new equipment to conform to G.O. 91 and 111, decreasing maximum rated power to 1 KW.

Also, WDEQ, Radiomarine Corp. of America, "Nellwood II", authority to operate for a period of not to exceed 60 days, in conformity with the Maritime Plan; KDI, Same Co., Moored ship, "Santa Flavia", Nushagak River, Alaska, modification of license to July 15th, to cover change in name plates on transmitter and increase in power to 200 w.; City of Syracuse, Syracuse, N. Y., C. P. for police service, 1712 kc., 150 watts; KGPA, Seattle Police Dept., Seattle, Wash., license for police service, 2416 kc., 250 watts; W2XDR, Atlantic Broadcasting Corp., Wayne, N. J., license covering experimental station; W3XO, American Telephone and Telegraph Co., portable in N. J., renewal of license; Aeronautical Radio Inc.: KGQZ, San Diego, Cal., C. P. to change location to Lindbergh Field, San Diego, and install new transmitter; KQX, Bakersfield, Cal., C. P. to change location to Kern Co. Airport, Bakersfield, and install new transmitter; KFM, Sacramento, Cal., C. P. to move transmitter to new municipal airport, Sacramento; KGSC, Oklahoma City, Okla., C. P. for new transmitter; KLP, Radiomarine Corp. of America, Ugenik, Alaska, renewal of two licenses to July 15, 1931 (granted June 8).

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## PATENTS, PATENT SUIT, TRADE-MARKS, DESIGNS

The following patents were granted during the week ending June 9, 1931:

- 1,808,789. Sound Repeater for Sound Reproducing Machines. Daniel William Rantine, Brooklyn, N. Y. Filed August 24, 1928.
- 1,808,867. Directional Antenna Array. John Stone Stone, San Diego, Calif., assignor to American Telephone and Telegraph Co. Filed January 26, 1927.
- 1,808,868. Directional Antenna Array. John Stone Stone, San Diego, Calif., assignor to American Telephone and Telegraph Company. Original application filed January 26, 1927. Divided and this application filed Dec. 19, 1928.
- 1,808,869. Directional Antenna Array. John Stone Stone, San Diego, Calif., assignor to American Telephone and Telegraph Company. Original application filed January 26, 1927. Divided and this application filed November 23, 1929.
- 1,808,889. Manufacture of Metal Having High Emissivity. Colin G. Fink, Yonkers, N. Y. Filed June 21, 1924.
- 1,808,894. Electric Wave Translation System. Raymond A. Heising, Millburn, N. J., assignor to Western Electric Company, Inc., New York, N. Y. Filed April 29, 1924. Renewed April 11, 1929.
- 1,808,923. Synchronizing System. Joseph W. Horton, Cambridge, Mass., assignor to Bell Telephone Laboratories, Inc., New York, N. Y. Filed March 29, 1929.
- 1,808,941. Radio System. Arthur F. Van Dyck, Yonkers, N. Y., assignor to Radio Corporation of America. Filed November 7, 1925.
- 1,809,027. Radio Receiving System. Ernest G. Danielson, San Francisco, Calif. Filed June 23, 1925.
- 1,809,035. Sound Horn. Jesse Barnum Hawley, St. Charles, Ill. Filed July 8, 1927.
- 1,809,036. Electrostatic Sound Reproducer. Jesse B. Hawley, St. Charles, Ill., assignor to United Reproducers Patents Corporation, St. Charles, Ill. Filed March 7, 1928.

- 1,809,067. Method Of Making Cathodes. Howard T. Reeve, Millburn, N. J., assignor to Western Electric Company, Inc., New York, N. Y. Original application filed Oct. 7, 1924. Divided and this application filed June 9, 1928.
- 1,809,070. Means and Method of Secret Transmission of Signals. Carl Schapira, Berlin, Germany, assignor to Gesellschaft fur Drahtlose Telegraphie m.b.H., Berlin, Germany. Filed July 1, 1927, and in Germany July 16, 1926.
- 1,809,081. High Frequency Telephony System. Paul Tatz, Berlin, Germany, assignor to Gesellschaft fur Drahtlose Telegraphie M.b.H., Hallesches Ufer 12/13, Berlin, S.W. 11, Germany. Filed June 12, 1925, and in Germany June 13, 1924.
- 1,809,095. Process of Coating Thermionic Cathodes. James R. Wilson, Mountain Lakes, and Charles M. Blackburn, East Orange, N. J., assignors to Bell Telephone Laboratories, Inc. New York, N. Y. Filed November 30, 1927.
- 1,809,099. Vacuum Tube. Harold D. Arnold, Maplewood, N. J., assignor to Western Electric Company, Inc., New York, N. Y. Original application filed November 2, 1915. Divided and this application filed February 3, 1919.
- 1,809,115. Apparatus for Producing Ions. Robert H. Goddard, Worcester, Mass. Filed July 16, 1926.
- 1,809,134. Method for Eliminating Disturbances in Receiving Wireless Telegraphy and Telephony. Alexander Meissner, Berlin, Germany, assignor to Gesellschaft fur Drahtlose Telegraphie m.b.H., Berlin, Germany. Filed February 19, 1924, and in Germany Feb. 24, 1923.
- 1,809,206. Apparatus and Process for the Manufacture of Vacuum Tube Electrodes. Albert Loppacker, Bloomfield, N. J., assignor to Radio Corporation of America, New York, N. Y., by direct and mesne assignments. Filed May 29, 1926.
- 1,809,229. Electric Discharge Tube. Albert Charles Bartlett and John Walter Ryde, Wembley, England. Filed Nov. 17, 1927, and in Great Britain Nov. 25, 1926.
- 1,809,296. Portable Radio Apparatus. William M. Heina, Long Island City, assignor, by mesne assignments, to Transitone Automobile Radio Corporation, Philadelphia, Pa. Filed February 9, 1928.
- 1,809,310. Method and Means for Reproducing Photographic Sound Records. Freeman H. Owens, New York, N. Y., assignor to Owens Development Corporation, New York, N. Y. Filed March 8, 1929.
- 1,809,314. Sound Amplifying Device. Carmen E. Ross, Vancouver, British Columbia, Canada, assignor to W. Wyllie Johnston, trustee, Vancouver, Canada. Filed May 21, 1928, and in Canada, March 28, 1928.



- 1,809,475. Audion Tube. Ralph B. Dowler, Jr., Memphis, Tenn. Filed March 5, 1930.
- 1,809,493. Sound Box for Talking Machines and Like Devices. Leo Andrea Smith, Wimbledon, England. Filed July 15, 1926, and in Great Britain July 25, 1925.
- 1,809,509. Radio Tuning Mechanism. Alfred Crossley and Leland H. Hansen, South Haven, Mich., assignors to Howard Radio Company, South Haven, Mich. Filed June 27, 1930.
- 1,809,530. Volume Control. Lawrence T. Phelan, Philadelphia, Pa. Filed April 11, 1929.
- 1,809,571. Loud Speaker. Henry Joseph Round, London, England, assignor to Radio Corporation of America. Filed November 11, 1924, and in Great Britain, November 19, 1923.
- 1,809,578. Cone Type Loud Speaker. William H. Bristol and Franklin B. Bristol, Waterbury, Conn., assignors, by mesne assignments, to Wm. H. Bristol Talking Picture Corporation, Waterbury, Conn. Filed April 10, 1926.
- 1,809,597. Double Reentrant Cone Loud Speaker. Alexander McLean Nicolson, New York, N. Y., assignor, by mesne assignments, to Federal Telegraph Company. Filed March 17, '27.
- 1,809,617. Facsimile System. George Maurice Wright, Great Baddow, Chelmsford, England, assignor to Radio Corporation of America. Filed May 23, 1929, and in Great Britain, May 31, 1928.
- 1,809,624. Resonator. Erich Giebe and Adolf Scheibe, Charlottenburg, near Berlin, Germany, assignors to Radio Corporation of America. Filed April 21, 1927, and in Germany April 24, 1926.
- 1,809,630. Valve Transmitter Arrangement. Wilhelm Kummerer, Berlin Germany, assignor to Telefunken Gesellschaft fur Drahtlose, Telegraphie m.b.H., Berlin, Germany. Filed December 15, 1928, and in Germany December 29, 1927.
- 1,809,637. Indicating Device. Alfred B. Moulton, Riverhead, N. Y., assignor to Radio Corporation of America. Filed December 3, 1927.
- 1,809,669. Sound Producing Device. Ruperto G. Borromeo, Samar, P.I. Filed July 20, 1928.
- 1,809,676. Electrical Generating System. Charles A. Culver, Northfield, Minn., assignor to Wired Radio, Inc., New York, N. Y. Filed February 15, 1929.

- 1,809,683. Frequency Responsive Apparatus. Alan S. Fitz Gerald, Schenectady, N. Y., assignor to General Electric Co. Filed October 4, 1928.
- 1,809,684. Sound Recording and Reproducing Instrument. Paul B. Flanders, East Orange, N. J., assignor to Bell Telephone Laboratories, Inc., New York, N.Y. Filed April 28, 1928.
- 1,809,713. Microphone. Walter Kuhnert, Vienna, and Max Maurer, Klosterneuburg, Austria. Filed January 7, 1927, and in Austria, April 16, 1926.
- 1,809,754. Electrostatic Reproducer. Joseph J. Steedle, Scranton, Pa., Filed May 13, 1929.
- 1,809,789. Static Eliminator. Fred R. Monroe, Harold K. Dolson, and Bayard T. Tuttle, Middletown, N. Y. Filed February 12, 1930.

#### Adverse Decision In Interference

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:

Pat. 1,692,762, C. W. Peterson, Loud Speaker, decided April 2, 1931, claim 3.

#### Patent Suit

- 1,789,949. A. Georgiev, Electrolytic cell, filed April 11, 1931, D. C., S. D. N. Y., Doc. E 59/174, Aerovox Wireless Corp. v. Mayo Laboratories, Inc.

#### Trade-Mark Registration Not Subject To Opposition

- 284,038. Barker Bros., Inc., Los Angeles, Calif. Filed September 17, 1930. "TUSCANY" for Radio Receiving Sets and parts thereof. Claims use since April 15, 1930.



Designs

- 84,316. Cabinet for Radio Receiving Apparatus. Charles S. Bradley, Philadelphia, Pa. Filed February 17, 1931. Term of patent 7 years.
- 84,338. Radio Cabinet. John J. Herlihy, Glenwood, Pittsburgh, Pa. Filed May 7, 1930. Term of patent 14 years.
- 84,349. Wall Inset Radio Cabinet. Carl Oscar Johnson, Spokane, Wash., Filed April 15, 1931. Term of patent 7 years.
- 84,369. Radio Cabinet. John A. Rancorn, Camden, N. J., and Everett Worthington, Chicago, Ill., assignors to RCA Victor Co. Filed April 10, 1931. Term of patent  $3\frac{1}{2}$  years.
- 84,370. Radio Cabinet. John A. Rancorn, Camden, N. J., and Everett Worthington, Chicago, Ill., assignors to RCA Victor Company. Filed April 10, 1931. Term of patent  $3\frac{1}{2}$  years.

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