

# 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 :: :: **CONFIDENTIAL—NOT FOR PUBLICATION.** :: ::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. 458

## OPEN RADIO POOL HIT BY O. H. CALDWELL

Following are excerpts of an article written by O. H. Caldwell, former Radio Commissioner, for "Electronics", of which he is now editor:

"Proposal by the Department of Justice of an 'open patent pool' as the condition of withdrawing the Government's suit against the Radio Corporation of America and its associated companies, has created wide discussion in radio circles. Whatever the accession of the principal defendants to the proposal - from several independent quarters have come opinions that a patent pool of the kind proposed might turn out thoroughly unsatisfactory to the radio industry, and especially to the radio inventors to whom the art must look for its further advances.

"The fear among the independent radio manufacturers is that an 'open patent pool', administered under the supervision of the Federal Government, would have to admit as members all applicants for licenses, whatever their experience in radio. 'Every parts-maker, every ex-soap-manufacturer, who has had a hungry eye on radio in the past, would come rushing to the Federal Radio Patent Pool to get a license to go into the radio business', declared one commentator, 'and since the Government can make no distinctions, we would have a whole crop of new manufacturers in the radio business, adding to all our present troubles of over-production.'

"It is known, for instance, that with only 35 companies now holding RCA licenses (and some out of business), there are at present applications of 55 other 'intending manufacturers' before the present custodians of the RCA group patents. And it is declared that a dozen times as many 'intending manufacturers' might be expected to demand licenses of a government board or 'open patent pool' administration.

"In Radio Manufacturers' Association circles, confidentially expressed opinion was to the effect that while a pool is most desirable, it would be better to abandon the 'open' pool idea, and adhere to a private pool of RMA members. Such a pool would keep radio in the industry's hands, without admitting a horde of new radio-set builders.

"But it is the radio inventors who have expressed chief concern at the recent proposals to pool all radio patents. Under such circumstances, they fear, the inventor would have only one prospective customer, the pool, to which to sell his brain-child. There might be little incentive to the inventor to produce, if no competitive bidding were offered by which to fix a price for his patent. And there would be no incentive for any single manufacturer member of the patent pool to tender a handsome check to the inventor, if the patent thus purchased immediately or shortly became available to all competitors in the radio business.



"Meanwhile it is known that the Radio Corporation group are giving careful consideration to the 'open pool' plan proposed by the Department of Justice. With a gun at their heads, in the form of the Government suit, accompanied by some \$60,000,000 in private triple-damage cases which would undoubtedly be assessed against the RCA group if the Government case should go against them, the 'trust' appears willing to listen carefully to any proposal which might mean the withdrawal of this Government suit and its accompanying menace of staggering fines."

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#### KTNT ARGUMENT IS POSTPONED TO AUGUST 10TH

Oral arguments on the application of Norman Baker for a temporary injunction against the Federal Radio Commission, growing out of the removal of KTNT, of Muscatine, Iowa, from the air, have been postponed until next Monday. The action was taken on motion of counsel for Mr. Baker.

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#### TELEVISION REQUESTS ON INCREASE

While applications for broadcasting facilities have decreased considerably since the opening of the fiscal year, the requests for television permits are mounting.

One one day this week three such applications were received by the Federal Radio Commission, while a fourth sought a license to begin operations in the ultra-high frequencies following the recent receipt of a construction permit.

Nearly a score of applications for such stations have been received in the last few weeks. They will not be acted on, however, until the Commission reconvenes in September, and all, under regular Commission procedure, will be designated for hearing prior to definite action.

The new applications just received were from the Atlanta Journal, operating Station WSB, at Atlanta, which seeks a 500-watt station to operate on the television channel's 2,000 to 2,100 and 2150 and 2850 kilocycles; Gimbel Bros. Television Development and Research Co., of Philadelphia, operating Station WIP, of Philadelphia, for a 500 watt station on the 2100 to 2200 kilocycle channel, and the Television Laboratoris, Ltd., of San Francisco, seeking a 1,500 watt station for assignment on the 2100 kilocycle channel.

The Shortwave and Television Corporation, of Boston, filed an application for license to cover a construction permit for operation in the ultra-high frequencies set aside by the Commission for experimental television. It seeks power of 30 watts for the proposed portable station. This company already is maintaining television broadcasts on regular schedule at Boston in the regular television bands in the continental short-wave spectrum set aside by the Commission.

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#### RMA DISCUSSES TELEVISION; TO ENTER PATENT POOL

The Board of Directors of the Radio Manufacturers' Association, meeting last week in Niagara Falls, Canada, decided to intervene actively in the present negotiations for the establishment of a radio patent pool. It was also the consensus of the manufacturers that commercial television is still at least a year away.

J. Clarke Coit, of Chicago, President of the RMA, was authorized to appoint a committee or small committees to represent the RMA in conferences with various groups of manufacturers and with officials of the Department of Justice and the Radio Corporation of America. Mr. Coit will call meetings soon of various manufacturing groups involved, including the set manufacturers, the tube manufacturers, the speaker and amplifier, and other group interests. The RMA committee or committees will confer with the various groups in an effort to work out some patent plan which may prove acceptable to them and to the Government and also the Radio Corporation of America. Plans of the manufacturers' committees will be submitted later to the RMA Board of Directors for approval and subsequently to the Department of Justice.

The progress and prospects of television were discussed by the Directors. It was the consensus of opinion, Bond Geddes, Executive Vice-President, stated, that leading radio manufacturers are not planning before the Fall of 1932 to present television, even in its earliest stages to the public. The initial presentation, it is expected, will be comparable to the crystal set stage of radio.

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## NEW RADIO POLICE STATION OPENED

A new sub-station of the Federal radio police, the Radio Division of the Department of Commerce, has been opened at Miami, Fla., according to announcement by William D. Terrell, Director of Radio. Joseph H. McKinney, Radio Inspector, has been placed in charge. He was formerly at Dallas, Texas.

Miami was chosen for the new office, according to Mr. Terrell, because of the increased shipping entering the port and because it is centrally located.

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## RADIO GAINS IN CANADA

Radio in Canada continues to grow rapidly in popularity. It has come to be an established feature throughout the Dominion. An official report issued recently shows that at the end of November, 1930, there were 444,676 licensed radios in Canada, or about one for every twenty-two of the population. The total of 444,676 is 20,530 higher than the number of sets licensed by the Canadian Department of Marine at the end of the Canadian Government fiscal year, March 31, 1930. Ontario leads the Provinces with 228,480 sets; then comes Quebec with 81,033, followed by British Columbia with 36,904; Manitoba with 27,929; Saskatchewan, 25,921; Alberta, 19,445; Nova Scotia, 14,052; New Brunswick, 9,746; Prince Edward Island, 1,053, and Northwest Territories, 113.

Toronto, the capital of Ontario, leads all Canadian cities with 71,143 sets. In Western Canada, Vancouver heads the list with 17,830. Winnipeg is second with 16,953.

A total of 1,351 transmitting licenses have been issued by the Canadian Government so far this year, of which 271 are ship-commercial, 90 private commercial broadcasting, 44 public commercial, 130 private commercial, 84 experimental, 679 amateur experimental and 12 miscellaneous. There are also about 70 other transmitting stations under the direct control of the Canadian Government Department of Marine, such as coastal and direction finding stations, for the benefit of ships at sea.

Every owner of a radio set in Canada is required to take out a license from the Canadian Government at a cost of \$1 per year, for which he receives service in the detection of interference and other measures to promote good reception.

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## GOSPEL BROADCASTS OVER WTMJ GRATIFYING

The following appeared in "Gospel Voice", issued by Station KFUD, of St. Louis, under the signature of Prof. G. C. Barth, President of Concordia (Lutheran) College of Milwaukee, who directs the radio programs of the Lutheran churches over WTMJ, the Milwaukee Journal station:

"Our experiences have been very gratifying. We have reached more people than we dared to hope. The area served by our broadcast comprises all Wisconsin, Northern and Central Illinois, Northern Indiana, Northern Ohio, the greater part of Michigan, and parts of Iowa and Minnesota and extends into Canada. During the past three years we have succeeded in gaining a large and continually growing number of regular listeners-in.

"When the Milwaukee Journal, about two years ago, for reasons unknown to us, decided to withdraw from us the privilege to broadcast, an avalanche of 3,000 letters produced a rapid change of mind on the part of the men in charge of the Promotion Department. These letters were handed me with the remark: 'Here is the reason why you are back on the air.' If the estimate is correct that only one out of every 200 listeners-in writes, we must have a very large radio audience."

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## DENIALS FOR KFJH AND WSAI RECOMMENDED

Although Kansas is 15 per cent under quota, and Missouri is 12 per cent over quota in their respective allotments of broadcasting facilities, Examiner R. H. Hyde recommended to the Federal Radio Commission this week that the application of KFJH, of Wichita, Kans., for unlimited time be denied.

Station KFJH now shares time with WOQ, of Kansas City, Mo., the latter being on the air two-sevenths of the time. At the same time the Examiner recommended that WOQ be permitted to change hands from the Unity School of Christianity to the Fairfax Broadcasting Company, a commercial concern.

Denial of the application of WSAI, operated by the Crosley Radio Corporation of Cincinnati, for 1,000 watts during the daytime was also recommended by Examiner Hyde on the ground that it would cause interference with WHBD, of Mt. Orab, Ohio.

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## CRIMINALS INTERCEPTING POLICE MESSAGES

While 50 municipal and State Police Departments have found short wave radio services valuable aids in the detection of crime and the apprehension of criminals, some of the larger cities are finding these advantages offset by the use of short wave receivers by criminals in intercepting messages broadcast to police cars, according to William D. Terrell, Chief of the Radio Division of the Department of Commerce.

The police radio service was most effective about two years ago, when introduced, Mr. Terrell explained, because short wave receivers were then not manufactured for general distribution. Recently, however, several concerns have started making them, and anyone is able to purchase such a receiver.

As the apparatus is simple to operate, the professional criminals have found them extremely useful in keeping a few jumps ahead of the police.

Several schemes are now being considered by radio-equipped Police Departments to overcome this handicap. Foremost among these is the use of a "scrambler" device, which converts a message into meaningless jargon which is wholly unintelligible when picked up by the ordinary receiver. This is done by an interchange of frequencies.

This scheme has the disadvantage, Mr. Terrell pointed out, of being adaptable by the criminals just as they have adopted the ordinary short wave receiver.

The use of a code has also been considered as a means of overcoming eavesdropping, but here again there is the likelihood that the clever law breakers will solve the code.

The most effective method the police can follow in outwitting the eavesdroppers, Mr. Terrell believes, is to make mechanical changes from time to time in their apparatus and to vary their communications so frequently that the criminals will be confused.

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## REPORTS ON N. Y. PROGRAM DELETION

The following appeared in the Editor and Publisher of August 1st, written by Robert S. Mann:

"First week of operation under the new plan adopted by New York newspapers in handling radio programs indicates that practically the only readers who noticed the omission of trade names were persons in the advertising field themselves.

"One important newspaper received only one telephone call and one letter, both asking why certain programs were being listed differently. In addition there was one letter from an advertising agency, protesting that it had built up the name of a program by long use, and that radio listeners would not recognize it under the new listing.

"A radio editor who made it a point to ask persons he met, found that even after a week had passed most of them did not know of the change.

"There was plenty of comment in advertising circles, to the general effect that mere mention of a trade name carried little urge to buy and that well-known programs could not be recognized as changed. It was accepted, however, that the new plan puts the radio column on the same plane with the rest of the newspaper as far as trade names are concerned."

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#### DEMAND FOR RADIO SETS IN MEXICO

Following, in part, is a report on the radio market in Mexico by Vice Consul Oscar C. Harper, of Nuevo:

"The increased demand for radio sets in the Laredo district may be attributed largely to the recent establishment in Nuevo Laredo and Reynosa of three low power broadcasting stations over which Mexican programs are presented.

"Heretofore little interest was manifested in radios, but the Mexican people as a whole are lovers of music, and the programs now broadcast are made up largely of Mexican music, some short lectures, and finished with phonograph records. Often the programs are given in English as well as in Spanish. Station XEP has a studio in one of the leading hotels in Laredo and a great deal of advertising is carried over the radio by merchants. The owners of the stations claim, however, that the low rates they must charge combined with the numerous taxes imposed make it exceedingly difficult for them to operate on a paying basis.

"Radio listeners are not restricted to the local stations, since there are long-wave, high-power stations in nearby cities that can be received during the cold winter months. Because of this factor the number of tubes does not have to be over three or four, and since good results can be obtained with these cheaper sets, the superior higher-priced set is at a disadvantage with the average purchaser. Nevertheless both long and short wave sets have found a market and several sets are being shown that are capable of receiving both long and short wave programs.

"Exports of radio receiving sets from the United States to Mexico during the year 1930 amounted to \$1,606,701 in value, and tubes worth \$146,086 were also shipped to that country.



"The principal drawback to a more extended sale of radio receiving apparatus is the apparent lack of technical knowledge on the part of the dealers.

"It is thought that the most favorable method of introducing radio sets and other electrical goods in the Laredo district would be by personal solicitation of a traveling representative. Many large houses include this part of Mexico in the itineraries of their salesmen whose territory embraces southwest Texas. The market may also be entered through the leading exporters and wholesalers of San Antonio or Laredo, Texas."

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#### WGY ADMITS VIOLATING SHORT WAVE AD RATE REGULATION

In reply to a letter from James W. Baldwin, Secretary of the Federal Radio Commission, Martin P. Rice, Vice-President in Charge of Broadcast Operations of General Electric, acknowledged that while the company had been quoting rates for use of its experimental station W2XAF, which transmits on short waves for international reception, the actual practice has now been discontinued. Practically no revenue had been realized from the short wave station, Mr. Rice said.

Mr. Baldwin wrote to General Electric on June 1st, after receipt of published information showing the company charged \$500 per hour for programs rebroadcast over W2XAF by means of short waves. The information, contained in the radio section of a trade publication, quoted also a rate of \$250 per hour when the relay station was used along with WGY.

Radio regulations specifically state that no pecuniary return may be derived from experimental use of the air, and it was said at the Commission that if General Electric assessed rates as quoted in "rate cards", then it was guilty of gross infraction of the regulations.

The Commission instituted its preliminary investigation, and it was said today that the matter has not yet been dropped, despite the promise that the practice would be discontinued and that General Electric admitted that it had inadvertently violated the Commission regulation.

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## APPLICATIONS RECEIVED BY FEDERAL RADIO COMMISSION

August 3 - WFEA, Rines Hotel Co., Manchester, N. H., voluntary assignment of C. P. to New Hampshire Broadcasting Company; WKZO, WKZO, Inc., Kalamazoo, Mich., modification of C. P. to extend completion date from 8/15/31 to 9/15/31; R. H. McNeely, Louie Brown, and E. M. Pace, d/b as WNAT Broadcasting Co., Vicksburg, Miss., C. P. resubmitted, amended to request 1500 kc., instead of 1310 kc., and facilities of KTSL in terms of units; WCAL, St. Olaf College, Northfield, Minn., license to cover C. P. granted 7/31/31 to change equipment and move transmitter locally; WJBC, Wayne Hummer & H. J. Dee, d/b as Kashkaskia Broadcasting Co., C. P. amended to request 1/2 time (on 1500 kc.) instead of unlimited time.

The following application was cancelled at the request of the applicant: WAWZ, Pillar of Fire, Zarephath, N. J.

August 4 - WRDO, WRDO, Inc., Augusta, Maine, modification of C. P. to move transmitter from Augusta, Maine to Lewiston, Me.; Alexander P. Mirante, New Britain, Conn., C. P. to erect a new station to use 1210 kc., 100 watts, unlimited time; Rice Massie, T.E. Sanders, and J. C. Taylor, d/b as Voice of the Blue Grass, Owensboro, Ky., C. P. to erect a new station to use 940 kc., 1 KW, unlimited time (facilities of WFIW); Robert Wilkin Stolzenbach, Springfield, Ohio, C. P. to erect a new station to use 1200 kc., 100 watts, unlimited time; KFPW, Southern Hotel Company, Fort Smith, Arkansas, license to cover C. P. granted 3/31/31 for change in equipment only; WKBB, Sanders Brothers Radio Station, Joliet, Ill., license to cover C. P. granted 4/3/31 for change in equipment only.

The following applications were returned to the applicants:

WPAD, Pierce E. Lackey & S. Houston McNutt, d/b as Paducah Broadcasting Co., Paducah, Kentucky, did not comply with General Orders No. 111 and No. 102; WCOC, Mississippi Broadcasting Co., Meridian, Mississippi, application not necessary.

### Applications, Other Than Broadcasting

August 3 - Pan American Airways, Inc.: KHFBY, NC-3314, KHFNM, NC-142-M, KHFAZ, NC-9137, KHFKP, NC-75-K, KHAKP, NC-8000, KHAVE, NC-8020, KHAPK, NC-8044, KHASH, NC-9107, KHAAZ, NC-9775, KHAWD, NC-395-E, KHAUF, NC-231-E, KHAOL, NC-9701, KHAXC, NC-396-E, KHFWD, NC-945-M, modification of aircraft licenses for change in frequencies to 333, 500, 3070, 5690, 8650, 1688 kc.; KHALO, NR-41-V, KHABY, NC-9776, KHFIR, NC-814-H, KHFFU, NC-811-H, KHFEV, NC-147-H, KHFHS, NC-812-H, modification of licenses for change in frequencies 333, 500, 3070, 5690, 8650, 1688 kc., 12 watts, aircraft.

Also, WLXG, Short wave & Television Corp., portable, license to cover C. P. for 43000-46000, 48500-50300, 60000-80000 kc., visual, 30 watts; WPDR, City of Rochester, Rochester, Minn., C. P. for increase in power to 400 w., 1712 kc., police; The Atlanta Journal Co.



Atlanta, Ga., new C. P. for visual station, 500 watts, 2000-2100, 2750-2850 kc.; Television Lab., Ltd., San Francisco, Calif., new C. P. for 2100 kc., or as assigned, 1500 w., television; Gimbel Bros., Television Development and Research Co., Philadelphia, Pa., new C. P. for 2100-2200 kc., band, 500 watts, visual; KQH, RCA Communications, Inc., Kahuku, Hawaii, modification of license for change of frequency and additional point of communication 15985 kc., 80 KW, point-to-point.

August 4 - Northwest Airways, Inc.: NC-303-N, NC-69-E, new licenses for aircraft on 3004, 3106, 5375 kc., 50 watts; Congress Square Hotel Co., Portland, Maine, new C. P. for 43-46 megacycles, 48.5 to 50.3 megacycles, 60 to 80 megacycles,  $\frac{1}{2}$  to 5 KW, special experimental service; E. F. McDonald, Jr., Chicago, Ill., new C. P. for frequencies to be determined, 3.6 watts, coastal harbor telephone service; KGUU, Aeronautical Radio, Inc., Little Rock, Ark., license covering C. P. for 3238, 3244, 3452, 3460, 3468, 3484, 5600, 5630 kc., 400 watts, aeronautical service; KGXA, Mutual Telephone Co., Manawahua, Hawaii, license covering C. P. for 39600 kc., 150 watts, point-to-point service; WMDZ, City of Indianapolis, Police Dept., Indianapolis, Ind., license covering C. P. for 2440 kc., 300 watts, emergency police service; KYV, Radiomarine Corp. of America, Pillar Bay, Alaska, license covering C. P. for 222, 262, 274, 460, 425, 500 kc., 200 watts, coastal and point-to-point service; WPEC, City of Memphis, Police Dept., Memphis, Tenn., license covering C.P. for 2470 kc., 150 watts, emergency police service; RCA Communications, Inc., Kahuku, Hawaii, KEQ, modification of point-to-point license for change in frequency to 6890 kc.; KGXB, Mutual Telephone Co., Manawahua, Island of Oahu, T. H., license covering C. P. for 46200 kc., 200 watts, point-to-point service; Press Wireless, Inc.: WRDC, Chicago, Ill., and WRDK, Hicksville, N. Y., modification of C. P. for extension of completion date to 4/18/32.

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## PATENTS, PATENT SUITS, TRADE-MARKS AND DESIGNS

The following patents were granted during the week ending August 4, 1931:

- 1,816,831. Combined Electrical Recorder and Reproducer for Phonographs. Orville M. Dunning, Orange, N. J., assignor to Thomas A. Edison, Inc., West Orange, N. J.. Filed July 10, 1930.
- 1,816,832. Synchronized Photography and Sound Recording and Reproducing. Charles W. Ebeling, New York, N. Y., assignor to Harrison W. Rogers, Inc. Filed November 26, 1927.
- 1,816,862. Amplifying System. Robert A. Miller, Plainfield, N. J. assignor to Bell Telephone Laboratories, Inc., New York, N. Y. Filed April 2, 1930.
- 1,816,896. Phonograph. Nelson C. Durand, East Orange, and Sam G. Langley, Meplewood, N. J., assignors to Thomas A. Edison, Inc., West Orange, N. J. Filed March 29, 1929.
- 1,816,906. Electromagnetic Device. Warren C. Jones, Flushing, N.Y., assignor to Bell Telephone Laboratories, Inc., New York, N. Y. Filed December 19, 1928.
- 1,816,913. Protective Circuit for Vacuum Tubes. John C. Schelleng, Millburn, N. J., assignor to Bell Telephone Laboratories, Inc., New York, N. Y. Filed May 26, 1928.
- 1,816,917. Apparatus for the Measurement of Acoustic Impedance. Edwin H. Smythe, Evanston, Ill., and Paul B. Flanders, East Orange, N. J., assignors to Bell Telephone Laboratories, Inc., New York. Filed March 1, 1929.
- 1,816,953. Privacy Signaling System. Ralph Bown, Maplewood, N. J., assignor to American Telephone and Telegraph Co. Filed September 24, 1929.
- 1,817,021. Electric Pick-Up. Walter H. Schimpf, Toledo, Ohio. Filed September 20, 1929.
- 1,817,030. Piezo-Electric Frequency Meter. Heinrich Eberhard, Berlin, Germany, assignor to Radio Corporation of America. Filed December 29, 1925 in Germany, in U.S. November 2, 1926.
- 1,817,094. Production of Phonograph Styli. Sherwood T. Moore, Orange, N. J., assignor to Thomas A. Edison, Inc., West Orange, N. J. Filed January 22, 1929.



- 1,817,098. Colored Facsimile System. Richard Howland Ranger, Newark, N. J., and Samuel B. Smith, Brooklyn, N. Y., assignors to Radio Corporation of America. Filed March 1, 1929.
- 1,817,177. Sound Recording and Sound Reproducing and Locating Apparatus. Franklin M. Doolittle, New Haven, Conn., assignor to Radio Corporation of America. Filed June 14, 1921.
- 1,817,181. Means for Determining Electrical Axes in Crystals. Heinrich Eberhard, Berlin-Friedenau, Germany, assignor to Radio Corporation of America. Filed June 3, 1927, and in Germany July 21, 1926.
- 1,817,247. Inductance System. Louis A. Beghard, Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y. Filed June 5, 1929.
- 1,817,248. Adjustable Inductance System. Louis A. Gebhard, Washington, D. C., assignor to Wired Radio, Inc., New York, N. Y. Filed July 31, 1929.
- 1,817,294. Electrical Coupling System. Fulton Cutting and Jay L. Taylor, New York, N. Y. Filed March 16, 1928.
- 1,817,354. Wireless Loud Speaker and the Like. Gabriel Gonzalez de Andia-Yrarrazaval, London, England, Filed April 16, 1929, and in Great Britain April 17, 1928.
- 1,817,355. Vacuum Tube Mounting. Harold F. Elliott, Palo Alto, Calif., assignor, by direct and mesne assignments, to Victor Talking Machine Company, Camden, N. J. Filed May 24, 1926.
- 1,817,443. Radio Appliance. Orin E. Marvel, Dayton, Ohio, assignor, by mesne assignments, to General Motors Radio Corporation. Filed May 6, 1927.
- 1,817,445. Vacuum Tube and Method of Manufacture. Ernest Yeoman Robinson, Lymn, England, assignor to Associated Electrical Industries Limited. Filed December 29, 1925, and in Great Britain Dec. 31, 1924.
- 1,817,448. Space Charge Device. Dayton Ulrey, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Co. Filed February 26, 1925.
- 1,817,477. Talking Machine. Horace Leopold Tucker Buckle, Iver Heath, England, assignor to Victor Talking Machine Company. Filed October 17, 1924, and in Great Britain October 23, 1923.
- 1,817,489. Sound Transmission. W. Bartlett Jones, Chicago, Ill. Filed December 5, 1928.

- 1,817,502. Television Apparatus. Vladimir K. Zworykin, Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Co. Filed February 15, 1929.
- 1,817,611. Telephone-Phonographic Means of Communication. George R. Cooper, Upper Darby, Township, Pa. Filed September 22, 1928.
- 1,817,612. Sound Reproducing System. Palmer Hunt Craig, Cincinnati, Ohio, assignor to Invex Corporation. Filed July 11, 1928.
- 1,817,636. Electron Emissive Materials, Friedrich Meyer, and Hans-Joachim Spanner, Berlin-Halensee, Germany, assignors, by mesne assignments, to Electrons, Inc. Filed June 6, 1927, and in Germany June 9, 1926.
- 1,817,657. Electrical Condenser. Charles E. Vawter, Philadelphia, Pa., assignor to Dubilier Condenser Corp., New York, N.Y. Filed March 21, 1925.
- 1,817,674. Vacuum Tube. James V. Capicotto, Brooklyn, N. Y., assignor to Dubilier Condenser Corporation, New York, N. Y. Filed June 10, 1924.
- 1,817,714. Metal Tank Rectifier. Errol B. Shand, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Co. Filed March 18, 1925.
- 1,817,758. Phonograph Apparatus. Edward W. McSheen, Schenectady, N. Y., assignor to General Electric Company. Filed November 20, 1929.
- 1,817,762. Seal for Mercury Arc Rectifiers. David C. Prince, Schenectady, N. Y., assignor to General Electric Co. Filed February 28, 1925.
- 1,817,781. Sound Reproducing Apparatus. Oscar Steiner, Philadelphia, Pa., assignor to General Electric Company. Filed July 5, 1927. Renewed October 16, 1929.
- 1,817,787. Magnet System for Converting Electrical into Mechanical Energy or Inversely. Roelof Vermeulen and Arend Thomas van Urk, Eindhoven, Netherlands, assignors to Radio Corporation of America. Filed November 1, 1929, and in the Netherlands, November 13, 1928.
- 1,817,795. Amplifying System. Paul D. Andrews, Schenectady, N. Y. assignor to General Electric Company. Filed April 11, 1928.
- 1,817,799. Rectifier and Like Device Based upon the Use of Mercury Vapor. Andre Becq, Paris, France, assignor, by mesne assignments, to General Electric Company. Filed March 5, 1926, and in France March 14, 1928.



### Patent Suits

- 1,258,423, F. Lowenstein, Variable electrical apparatus, D. C., Conn. (New Haven), Doc. E 1850, Scovill Mfg. Co., v. J. Satler (Eagle Radio Co.). Claims 1, 2, 3 and 4 held infringed Sept. 20, 1927.
- 1,781,489. A. I. Abrahams, Loud speaker horn, filed March 12, 1931, D. C., E. D. N. Y. Doc. 5412, A. I. Alexander et al v. N. Faggan et al.
- Des.** 82,797, S. I. Cole, Condenser casing, filed March 6, 1931, D. C. E. D. N. Y., Doc. 5407, Aerovox Wireless Corp. v. Micamold Radio Corp.

### Adverse Decisions In Interference

- Pat. 1,773,605, W. Sefton and P. Sefton, Loud speaker, decided July 15, 1931, claims 1, 2, 3, 4, 5, and 6.
- Pat. 1,786,042, Edward Toman, Electric Pick-up device, decided July 15, 1931, claim 10.

### Trade-Marks

- Ser. No. 313,538. Dwarf Radio Manufacturing Co., Ltd., Los Angeles, Calif. Filed April 20, 1931. "Dwarf" for Radio Receiving Sets and parts thereof and accessories thereto - namely loud speakers, vacuum tubes, switches and aerial and ground apparatus. Claims use since January 16, 1931.
- Ser. No. 314,634. Stromberg-Carlson Telephone Manufacturing Co., Rochester, N. Y., Filed May 15, 1931. Trade-Mark: "Stromberg-Carlson" for Talking Machines, electrically operated talking machines, automatic record shifting devices, talking machines adapted for use in centralized electrical program distributing systems. Claims use on talking machines and electrically-operated talking machines since Sept. 1, 1927; on automatic record shifting devices, talking machines provided with record shifting devices since October 31, 1931; and on talking machines adapted for use in centralized electrical program distributing systems since May 29, 1928.
- Ser. No. 316,202. Grigsby-Grunow Company, Chicago, Ill. Filed June 24, 1931. Trade-Mark: "The Voice of Majestic" for publication in magazine form. Claims use since June 1, 1931.

### Trade-Mark Registrations Granted

- 285,696. Radio Loud Speakers, Choke Coils, and Electromagnets. National Malleable and Steel Castings Co., Cleveland, Ohio. Filed February 25, 1930. Published May 12, 1931.
- 285,708. Radio Electron Tubes. National Union Radio Corp., Newark, N. J. Filed February 11, 1931. Published May 12, 1931.
- 285,713. Radio Receiving Sets. Miles A. Long, doing business as Cardinal Radio Mfg. Co., Los Angeles, Calif. Filed January 8, 1931. Published May 19, 1931.
- 285,738. Radio Receiving Sets and Parts, Supplies, Etc., for Talking Machines, etc. Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y. Filed December 12, 1930. Published May 12, 1931.

### Designs

- 84,778. Radio Cabinet. Francis J. Foley, Norwood, Mass. Filed June 2, 1931. Term of patent  $3\frac{1}{2}$  years.
- 84,800. Radio Cabinet or the Like. Everett Worthington, Chicago, Ill., assignor to The Stromberg-Carlson Telephone Mfg. Co., Rochester, N. Y. Filed April 2, 1931. Term of patent  $3\frac{1}{2}$  years.

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