

# HEINL RADIO BUSINESS LETTER

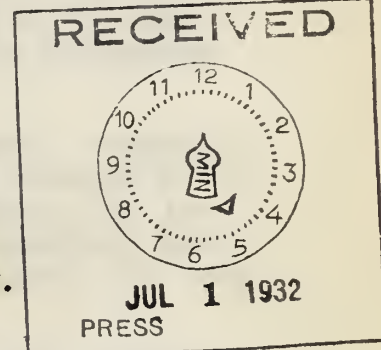
INSURANCE BUILDING

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 :: :: **CONFIDENTIAL—NOT FOR PUBLICATION.** :: ::

*1932*  
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No. 541



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## GREAT RADIO SHAKEUP MAY FOLLOW INTERNATIONAL CONFERENCE

Within the next year the Federal Radio Commission may have to reorder the entire radio set-up in the United States in order to conform its allocations and licenses to the changes which may be worked out at the International Radio Conference in Madrid next September. This prediction was made by Senator Wallace White (R) of Maine, co-author of the radio act, while defending appropriations for the Commission.

"If that burden of reallocating all the radio channels in the country is placed upon the Radio Commission," Senator White declared, "it will be a responsibility calling not only for its present personnel, with all the resources now contemplated, but it may place a burden on the Commission which would call for very enlarged personnel and additional resources."

"There will be a conference at Madrid for the revision of the international radio treaty. This international radio treaty makes an allocation, not to nations but to services, of the entire radio spectrum. It says what wave length and what channels may be used for ship-to-shore communication, for ship-to-ship communication, for aircraft communication, for point-to-point communication continentally, for point-to-point communication internationally, and it fixes the broadcasting bands which all the nations of the world must respect."

Senator White also called attention to the fact that under pending legislation Congress is proposing to transfer all of the functions of the Radio Division of the Department of Commerce to the Federal Radio Commission, and that means imposing upon the Federal Radio Commission some substantial duties and obligations not now vested in them by law.

The Radio Division of the Department of Commerce at this time has the responsibility of issuing all of the operators' licenses in the United States, and there are outstanding approximately 37,000 licenses to operators of all classes within this country. That burden, under proposed legislation, is now to be placed upon the Federal Radio Commission.

"The Radio Division of the Department of Commerce, as matters now stand, has the responsibility of making all the inspections of radio stations within the United States", Senator White explained. "They inspect, and have a staff for that purpose, all the land stations within the United States, and all stations upon ships of the United States. That is a burden to be transferred to the Federal Radio Commission."

"Under existing law, and in pursuance of international treaty, the Radio Division of the Department of Commerce has full responsibility with respect to international accounts arising out of international communications by radio, and that is a



troublesome and a burdensome duty, and that, too, is to be transferred to the Federal Radio Commission.

"Then, under existing law, the Radio Division of the Department of Commerce publishes from time to time the call letters of every station in the United States. That is a further burden which is to be transferred to the Federal Radio Commission.

"We are imposing, therefore, substantial and new burdens upon the Federal Radio Commission, and I have grave doubt, in the light of these added responsibilities, as to whether there is justification for making the reductions which the bill contemplates!"

An increase of \$12,000 - making the total annual appropriation asked for \$366,000 -- for the Federal Radio Commission was asked for by Senator Copeland, of New York.

"The purpose of this increase", Senator Copeland explained, "is to provide money for stenographic reporting. They have spent this year \$14,868 for stenographic reporting. They feel that they can do it next year for \$12,000. It must be remembered that the Federal Radio Commission is a judicial body, and its hearings have to be reviewed by the courts, and it is necessary that there should be stenographic reports of these hearings."

Senator Couzens, of Michigan, argued that \$350,000 was quite enough, even to include the stenographic item which he (Couzens) agreed was quite necessary. Senator Copeland replied that General Saltzman, chairman of the Radio Commission, thought otherwise and had made a strong plea for it.

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#### PRESIDENT WILSON'S LAST BROADCAST

Contributing a bit of unwritten history, Jack Foster, celebrated New York chronicler of radio events, has a dramatic recital of what he describes as the last radio address of former President Woodrow Wilson. It was on Armistice Day, November, 1923, at Mr. Wilson's home in S Street, Washington.

"I am told", Mr. Foster concludes, "that part of the speech was impressed on a magnetic wire and this record is supposed still to be in existence. If this is so, what a tremendously gripping broadcast it would make today when the whole nation owns radio receivers! The newspapers noted at that time that Mr. Wilson 'was heard by the greatest audience up to date'. Three stations - WCAP, Washington, which call letters since have been transferred to New Jersey; WAAF, New York, and WJAR, Providence - formed the primitive network. This 'greatest audience up to date' could not greatly have exceeded a mere 20,000 listeners."

Thus Mr. Foster takes us back to a day many years ago, when a man named O'Reilly, if memory is correct, invited us to an improvised laboratory in the Colorado Building, in Washington,

to hear some records of radio broadcasts which he had made on a small steel wire.

We were familiar enough with phonograph records at that time but the idea of recording a radio broadcast was fantastic. Yet a visit to the laboratory verified both assertions. There were records and they were recorded on steel wire. And the first record heard was the address of President Wilson which Foster speaks of.

Having attended press conferences we were familiar with the voice of Mr. Wilson, and though he was fatally ill at the time the record was made, we were struck by the faithful reproduction. And not the least remarkable was the device itself -- a small steel wire whirling between two small revolving wooden spools -- the wire winding up on one as it unwound from the other.

The operator explained that it was recorded by a magnetic process invented by a Russian and that any part of the wire could be demagnetized thus erasing that portion of the record. The wire could be used over and over again.

O'Reilly died shortly after that and where the record of President Wilson's speech is, if indeed it is still in existence, we do not know. There was also a record of a broadcast by President Harding-- the delivery of an address at Hoboken over the bodies of the first soldiers brought home from the World War.

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#### FEDERAL HEAD SAYS FIVE YEARS BEFORE EDUCATORS KNOW NEEDS

It probably will be five to ten years before educators can tell what they want in the way of radio facilities, William John Cooper, United States Commissioner of Education, declared recently. Commissioner Cooper said educators could not at present employ the fifteen per cent of the total number of channels they are now asking Congress for.

"How much time will we want for the work we have to do? This is a field in which there is no conclusion", he replied. "The educational people have asked for fifteen per cent of the channels. Undoubtedly they cannot use them at the present time. Whether they can or cannot in the immediate future remains to be seen. There is no doubt, however, that this much of the time ought to be kept from falling into the hands which will not return it and for this purpose a committee is at work. It is attempting to get Congress to act in the matter.

"A bill has been before Congress during the present session, but it seems that nothing will be done. Whether one may count on a bill passing at the next session remains to be seen. At the present time, therefore, we must say that so far as progress in education is concerned there has been little during the



past two years and so far as the time on the air is concerned, it appears that in its present state, education has enough time.

"Insofar as the future is concerned, it appears that the educators themselves desire 15 per cent but no case has been made to show that they are or are not entitled to this much. Probably during the period of depression work in radio is still going on.

"It is doubtful, however, whether much work in radio education is in progress. If ways and means are found of using radio for the better education of people, doubtless they will go into effect as soon as the depression is passed. At least it will probably be five or ten years before we can tell exactly what we want."

Turning his attention to the advertising phase of the situation, the Federal official said:

"If we could bring into the classroom radio advertising, let us say, advertising upon bread, and could subject that advertising to real tests of accuracy that would take into consideration the matter of nourishment and the healthfulness of the product, what a great thing it would be for the school as well as for the use of the product. Perhaps after a time this would result in one particular brand of bread having the lead of all the others. Or if we could handle the advertising of toothpaste in this fashion and subject that advertising to verification of the various claims made; if we could also check the facts which were not stated, perhaps we would find that after all there is little more to toothpaste than the mere soap and that anyone who was willing to have the taste of soap in his mouth would be saved all this outlay.

"It is this intermediate step which is hard for a school which exists at the expense of all the people to take for it seems to favor some persons above others and therefore appears to be unfair. If radio advertising is actually treated to such methods the 'ballyhoo' and exaggerations would be shown up."

One of the first things which Commissioner Cooper believes will come to pass will be that the radio will bring into the classroom the actual outside world.

"At the present time we are afraid to let this happen. There are men who are interested in what goes on in a classroom and who are interested in classroom advertising. They would advertise their own goods in school if they could do it without getting caught. But the man who has nothing to gain from the use of a classroom does not want someone else to gain. Accordingly, teachers must be careful."

Radio will make teachers more expert the Commissioner believes.

"At the present time there are a great many teachers in the schools who are not adapted to broadcasting", he continued. "Radio demands experts - experts in the sense of personalities and experts in the sense of people who have good voices. Those who have those qualities are said to possess radio personalities. At the present time not enough people are required for broadcasting to use more than a small portion of all who teach."

A field crying for recruits is the guidance field.

"The American School of the Air has made some experiments in this field with a moderate degree of success", Commissioner Cooper concluded. "I believe, however, that much more can be done and will be done. This work is admirably adapted to treatment by States. I can see no reason at all why there may not come a time when there may be in each State some one who may speak intelligently and interestingly upon the law, the ministry, medicine, teaching, business, and the various trades, until all of the professions and trades have been covered."

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#### GREAT STATIC AUTHORITY DEAD

Dr. L. W. Austin, President of the International Scientific Radio Union, who died Monday, June 27th, was one of the world's greatest authorities on static. Ocean static interested him particularly. His laboratory at the Bureau of Standards in Washington was a maze of antennae and mysterious instruments by means of which Dr. Austin and assistants listened day and night to static conditions in all parts of the world.

Dr. Austin was soft-spoken and modest. A true son of Vermont, he was a man of few words. One time a new radio editor, sensing a big story, dashed out to the Bureau of Standards, and asked, "Dr. Austin, what do you know about conquering static that you did not know a year ago?"

A scientist less sure of himself would have been considerably more verbose but Dr. Austin replied, "Not much!" Although a highly technical man, he took the greatest pains to make himself clear to the lay interviewer, though his subject frequently was so involved that the layman at times hardly understood what the scientist was talking about. Dr. Austin was always courteous, kindly, and infinitely patient.

Dr. Austin died at George Washington Hospital after an illness of several weeks following an operation. He was 65 years old.



Since 1904, he had been with the Bureau of Standards. Prior to that time, he was an instructor in Physics at the University of Wisconsin, and was in the employ of the German government from 1902 to 1904. He was educated in this country and Germany, receiving the degree of doctor of philosophy from the University of Strasburg in 1893.

Shortly before his last illness, Dr. Austin was elected President of the International Scientific Radio Union, and was ratified by the member countries while he was ill. He was a member of the American Physical Society and scientific organizations in foreign countries, and received the medal of the American Institute of Radio Engineers in 1927. He is survived by his widow, Laura A. Austin.

Funeral services were held Tuesday afternoon, June 28th, at 5 o'clock at St. Albans Church, National Cathedral Close, in Washington.

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#### CANADIAN RADIO RIGHTS INVOLVED IN WJAR-WEAN CASE

The question of increasing the power of a United States broadcasting station on one of the new Canadian-shared channels came up in a recent hearing at the Federal Radio Commission.

The hearing involved the applications of Station WJAR, and Station WEAN, both at Providence, Rhode Island, for permission to increase their power from 250 to 1000 watts. Station WEAN, the Shepard Broadcasting Company, is on 780 kilocycles, a channel on which Canada proposed to erect a 1,000 watt station under the recent United States-Canadian agreement. Station WJAR, the Outlet Co., is on an exclusive United States channel, and is not involved in the Canadian agreement, except insofar as its possible interference with Station WEAN is concerned. The Commission will decide the issue in the near future.

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#### APPLICATIONS RECEIVED BY THE FEDERAL RADIO COMMISSION

June 27 - WHBC, Edward P. Graham, Canton, Ohio, C.P. to install new equipment and increase operating power from 10 watts to 100 watts; WSB, Atlanta Journal Company, Atlanta, Ga., modification of C.P. for 50 KW, request for approval of proposed equipment and proposed transmitter location near Atlanta, Ga.; J. H. French, Decatur, Ala., C.P. for a new station resubmitted requesting 1420 kc., 16 watts, daytime; KGRS, E. B. Gish (Gish Radio Service), Amarillo, Texas, modification of license to change from 1410 kc. to 1340 kc., also for change in specified hours; KFDM, Magnolia

Petroleum Co., Beaumont, Texas, voluntary assignment of license to Sabine Broadcasting Co., Inc.; KGBU, Alaska Radio & Service Co., Inc., Ketchikan, Alaska, C.P. to rebuild station; transmitter location Mile Five, Wards Cove Road, near Ketchikan, Alaska, studio location 336 Front St., Ketchikan, Alaska, also change in specified hours.

June 28 - WMBO, WMBO, Inc., Auburn, N. Y., license to cover C.P. granted 5/24/32 for local station move; WWVA, West Virginia Broadcasting Corp., Wheeling, W. Va., license to cover C.P. granted 12/4/31, to move station locally and make changes in equipment; KPCB, Queen City Broadcasting Co., Inc., Seattle, Wash., license to cover C.P. granted 4/26/32 for auxiliary transmitter.

#### Applications Other Than Broadcasting

June 27 - WLD, Pere Marquette Radio Corp., Ludington, Mich., modification of C.P. for extension of construction period to 6/27/32, -7/15/32, coastal and point-to-point service; Harry Shaw; Portables - C.P. for new station 4100, 51400, 60000-400000 kc., .5 watt, 50 watts, general experimental service and license covering same (3 portables); Aeronautical Radio, Inc., 36 various locations, modification of licenses for 3322.5, 5592.5 kc., additional frequencies at 36 various locations, aeronautical service; Pacific Air Transport, Inc., on 15 planes, modification of licenses for 3322.5, 5592.5 kc., additional frequencies on 15 planes; Varney Air Lines, Inc., on 9 planes, modification of licenses for 3322.5, 5592.5 kc., additional frequencies on 9 planes; Boeing Air Transport, Inc., on 35 planes, modification of licenses for 3322.5, 5592.5 kc., additional frequencies on 35 planes.

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### DECISIONS OF THE FEDERAL RADIO COMMISSION

#### Applications Granted

June 28- KFLX, George Roy Clough, Galveston, Texas, C.P. to make changes in equipment 1370 kc., 100 watts, unlimited time; WMCA, Knickerbocker Broadcasting Co., Inc., New York City, modification of C.P. extending completion date from July 11th to October 11, 1932, covering removal of transmitter from Hoboken, N. J., to College Point, Causeway, Flushing, N. Y.; KGO, National Broadcasting Co., Inc., San Francisco, authority to install automatic frequency control; KWWC, Brownsville Herald Publishing Co., Brownsville, Texas, consent to voluntary assignment of license to Frank P. Jackson; WBHS, The Hutchens Co., Huntsville, Ala., modification of license to increase power from 50 to 100 watts; KFBI, The Farmers & Bankers Life Insurance Co., Milford, Kans., modification of license to move main studio from Milford to Abilene, Kansas.



Also, WJAG, Norfolk Daily News, Norfolk, Neb., authority to operate unlimited time July 17th in order to broadcast a program in celebration of 10th anniversary of the station; WBAP, Carter Publications, Inc., Fort Worth, Texas, authority to start installation of automatic frequency control equipment; WNBW, Home Cut Glass & China Co., Carbondale, Pa., authority to discontinue operation to October 1st pending consideration and decision of hearings on applications; KWSC, State College of Washington, Pullman, Wash., authority to reduce hours of operation during period from June 20th to Sept. 15th, as follows: Daily except Sunday, 6:30 to 8:30 A.M., 9:05 A.M. to 12 noon; 3:30 to 5:30 P.M., daily except Thursday and Sunday, 6:30 to 8:30 P.M.; WRBQ, J. Pat Scully, Greenville, Miss., authority to discontinue operation after June 26th, in order to make changes in equipment; WDEV, Harry C. Whitehill, Waterbury, Vt., permission to change specified hours of operation on Sundays during June, July and August (action taken 6/25/)

Also, KELW, Magnolia Park, Ltd., Burbank, Cal., permission to take depositions of matters pertaining to applications of KTM and KELW for modification and renewal of license (action taken 6/24); KTM, Pickwick Broadcasting Corp., Ltd., Los Angeles, permission to take depositions in hearing on renewal of license and associated applications (action taken 6/24); KVI, Puget Sound Broadcasting Co., Tacoma, Wash., renewal and modification of license 570 kc., 500 watts, unlimited time, issued in accordance with order of the Commission dated April 1, 1932; renewal effective from June 25; KXA, American Radio Tel. Co., Seattle, Wash., renewal of license, 760 kc., 250 w., 500 w., LS, limited time, effective from June 25th, issued in accordance with order of the Commission dated April 1, 1932.

Also, WTMJ, The Journal Co., Milwaukee, Wis., petition to intervene in the application of KTAR for modification of license to be heard Sept. 12, 1932; South Carolina Broadcasting Co., Columbia, S. C., granted, without prejudice, and withdrawn from hearing docket, application for new station to operate on 1310 kc., 100 watts, unlimited time (facilities of WROL, Knoxville, Tenn.); WWNC, Citizens Broadcasting Co., Asheville, N. C., regular renewal of license, and application heretofore set for hearing withdrawn from docket. Satisfactory equipment has now been installed; WJBY, Gadsden Broadcasting Co., Inc., Gadsden, Ala., protest of applicants against the Commission's authorization of May 24, 1932, granting C.P. for new station at Troy, Ala., to operate on 1210 kc., 100 watts, daytime by the Troy Broadcasting Co., Station WHET. Application of WHET designated for hearing to be heard upon issues contained in WJBY's protest; WERE, Erie Broadcasting Corp., Erie, Pa., granted protest of applicants against the authorization allowed WLBW to move station from Oil City to Erie, Pa., and directed WLBW's application be designated for hearing upon the issues contained in WERE's protest.

Also, KGPA, Seattle Police & Fire Dept., Seattle, Wash., C.P., police service, to change equipment replacing the present frequency control apparatus with new equipmeht; KGPW, Salt Lake City, a municipal corporation, Salt Lake City, Utah, C.P. for police service, 2470 kc., 100 watts; W8XAW, W. Va. University, Dept. of Physics, Morgantown, W. Va., C.P. for general experimental service; frequencies: 1594, 2392, 3492.5, 4797.5, 6425, 8655, 12862.5, 17310, 23100, 25700, 26000, 27100, 34700, 41000, 51400, 60000-400000, 401000 and above, 200 watts; Mackay Radio Telg. Co., Inc., near Montauk, N. Y., coastal telg., C.P. calling 500 kc., working 392 kc., 5 KW; W2XCF, American Radio News Corp., Carlstadt, N. J., modification of general experimental C.P. to extend completion date from August 17, 1932 to Feb. 17, 1933.

Also, W3XE, Philadelphia Storage Battery Co., Philadelphia, experimental visual broadcasting license, 2750-2850, 48500-50300, 60000-80000, 43000-46000 kc., 1500 watts; RCA Communications, Inc.; WGU, San Juan, P. R., modification of point-to-point telegraph license for additional point of communication - Port au Prince; KKL, Bolinas, Cal., same as above, points of communication Saigon, Panama, Bangkok, Siam; W2XAV, Bell Telephone Laboratories, Inc., Portable, Ocean Twp., N. J., renewal of special experimental license, 17310 and 18310 kc., 100 watts, plus or minus 3%.

### Renewal Of Licenses

WESG, W. Neal Parker & Herbert H. Metcalfe, Glen Falls, N. Y., granted regular renewal of broadcast license;

The following stations were granted renewal of licenses on a temporary basis, subject to such action as the Commission may take on their pending applications for renewal:

WIBM, Jackson, Mich., and WJBK, Detroit, Mich.

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WRDO, WRDO, Inc., Augusta, Maine, the Commission reconsidered its action of June 3, 1932, granting renewal of license for this station with transmitter location at Augusta House, Augusta, Maine, and directed a renewal be issued showing transmitter location at 341 Water Street, Augusta, Maine.

### Set For Hearing

WJAG, The Norfolk Daily News, Norfolk, Neb., renewal of license set for hearing because station's facilities have been applied for; The Tennessee State Press Co., (Publishers of Knoxville Times), Knoxville, Tenn., requests C.P. for new station, 560 kc., 1 KW night, 2 KW, LS, unlimited (facilities of WNOX);



Maurice L. Barrett, E. St. Louis, Ill., requests C.P. for new station, 1500 kc., 100 watts, unlimited time (facilities of WKBS); KGNO, The Dodge City Broadcasting Co., Inc., Dodge City, Kans., requests C.P. to change frequency from 1210 to 1340 kc., increase power from 100 watts to 250 watts, and make changes in equipment; Visual Radio Corp., Atlantic City, N. J., requests C.P. for visual broadcasting service.

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#### NEW EXPERIMENTS IN BROADCASTING ABROAD PLANNED

International radio broadcast hookups to stimulate the foreign trade of the United States will be a significant influence in developing American commerce abroad during the next 10 years, according to the Federal Radio Commission.

The depression has temporarily cut down experiments in international broadcasts but major companies are planning new tests which will lead to the international hookups being as frequently and commercially used as the nation-wide hookup of today.

During 1925, 1926, 1927 and 1928, experiments in relay broadcasting to foreign countries gained headway rapidly. Major companies carrying on tests were enthusiastic in predictions that broadcasts from the United States to foreign countries would become regular features for radio entertainment, and would as such have great commercial value in bringing America closer to other countries creating good will, and affording a valuable opportunity for stimulation of foreign trade.

As business began to drop, however, these companies were forced to cut down on their experiments, with the result that for the last two or three years, developments in international broadcasting have been virtually at a standstill.

Although there have been comparatively few practical tests of relays to foreign countries, these companies have not been idle. In laboratories they have developed new ideas which have proved successful in domestic relay tests, and which are expected to make international hookups function with more stability.

Particularly in reception have these experiments advanced. Tests on short waves, over which international programs are relayed, have resulted in better reception, more stable and with less interference than ever before.

The American Telephone & Telegraph Co., one of the organizations which have taken the lead in international relay experiments, is now considering laying a new transoceanic cable of permalloy, a new metal composition which is expected to improve transoceanic wire service. Other companies are planning to revive

their experiments, with the result that relay broadcasting tests soon may take up their rapid progress where they left off when economic conditions temporarily slowed their development.

Broadcasts to the United States of the Geneva conference were received here satisfactorily, and were a factor in stimulating new interest in international relay service.

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## SECOND APPEAL FILED IN SHORT-WAVE CONTROVERSY

A second appeal for rehearing in the dispute over short-wave radio telegraph frequency allocation was filed June 28th with the Court of Appeals of the District of Columbia by the Federal Radio Commission, citing "economic distress" in the communications business as the basis on which new hearings should be held.

The petition, filed by Duke M. Patrick, General Counsel for the Commission, requests that the Court clarify or amend its mandate of January 6, 1931, in which the Court instructed the Commission to allocate to R.C.A. Communications, Inc., and Mackay Radio and Telegraph Company, 40 short-wave frequencies left vacant when the Universal Wireless Communications Company became insolvent. A previous petition asking for rehearing, filed with the Court November 25, 1931, was denied.

The Commission bases its appeal on the fact that due to changed economic conditions further hearings are necessary if the vacant frequencies are to be allocated justly, and points out that with all telegraph companies now operating at a loss, and handling fewer revenue messages than at any time during the last few years, allocation of the 40 frequencies to the applicants "would, at the present time, tend to still further aggravate an already existing condition of economic distress" in the telegraphic communications field.

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## DEMAND FOR RADIO SETS INCREASING IN ARGENTINA

A marked seasonal increase in the demand for radio receiving sets developed in Argentina coincidentally with the opening of the opera season, according to a cablegram from Commercial Attache A. V. Dye, Buenos Aires. Radio sets from the United States are popular in the Southern Republic, and interest is centered around the four and five tube chassis. The opening of the opera season comes at the beginning of the radio season in the Southern Hemisphere.

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## PATENTS, PATENT SUITS, TRADE-MARKS

The following patents were granted during the week ending  
June 30, 1932:

- 1,864,527. Measuring Apparatus. Theodore G. Castner, East Orange, N. J., assignor to Bell Telephone Laboratories, Inc., New York, N. Y. Filed October 4, 1930.
- 1,864,528. Vacuum Bulb Mounting. Allen I. Crawford, New York, N.Y., and Myron S. Glass, East Orange, N. J., assignors to Bell Telephone Laboratories, Inc., New York, N. Y. Filed January 27, 1930.
- 1,864,543. Frequency Measuring Circuits. Joseph W. Horton, Millburn, N.J., assignor to Western Electric Co., Inc., New York, N. Y. Filed March 2, 1927.
- 1,864,560. Synchronizing System. Theodore A. Smith, Ridgewood, N.J., assignor to Radio Corporation of America. Filed November 30, 1928.
- 1,864,591. Thermionic Device. Julius E. Foster, Pittsburgh, Pa., assignor to Radio Corporation of America. Filed January 8, 1925.
- 1,864,615. Sound Reproducing Apparatus. Edwin Jay Quinby, Yonkers, N. Y., assignor to Radio Corporation of America. Filed December 6, 1929.
- 1,864,670. Electrooptical System. Frederick W. Reynolds, Grantwood, N. J., assignor to American Telephone and Telegraph Co. Filed February 12, 1929.
- 1,864,753. High Frequency Synchroscope. Alexander McLean Nicolson, New York, N. Y., assignor to Communication Patents, Inc., New York, N. Y. Filed July 25, 1930.
- 1,864,809. Loud Speaker. Burgess Dempster and Arthur B. Bruehl, Berkeley, Calif., assignors to The Magnavox Co., Oakland, Cal. Filed January 8, 1930.
- 1,864,875. Tuning Dial for Radios. Joseph J. Warren, Pittsburgh, Pa. Filed April 17, 1931.
- 1,864,882. Static and Interference Eliminator Control Unit for Guard Drain Circuits. Alexander Graham Anderson, Whiteland, Ind. Filed June 17, 1929.
- 1,864,890. Electrical Reproducer. Raymond T. Cloud, Chicago, Ill., assignor to Orchestraphone Co., Chicago, Ill. Filed November 19, 1927.

- 1,864,921. Method and Apparatus for Broadcasting Sound. Paul M. Titus, Binghamton, N. Y. Filed February 21, 1928.
- 1,864,963. Electron Discharge Device. Herbert Vadersen, Elizabeth, N. J., assignor to Bell Telephone Laboratories, Inc., New York, N. Y. Filed February 27, 1926.
- 1,865,036. Radio Circuit and Apparatus. David A. Nicosia and Harry Sippel, Chicago, Ill. Filed March 16, 1927.
- 1,865,065. Screen Grid Tube. Balthasar van der Pol, and Klass Posthumus, Eindhoven, Netherlands, assignors to Radio Corporation of America. Filed November 22, 1927, and in the Netherlands, November 19, 1926,
- 1,865,142. Means for Supporting the Electrodes of Thermionic Devices. Henry Joseph Round, London, and William James Picken, South-end-on-Sea, England, assignors to Radio Corporation of America. Filed February 23, 1922, and in Great Britain March 21, 1921.
- 1,865,171. Apparatus for Recording and Reproducing Sound. Harry E. Chipman, Springfield, Mass., assignor, by direct and mesne assignments to Andrew LeRoy Chipman. Filed May 3, 1928.
- 1,865,190. Synchronizing System for Television Apparatus. Charles W. Jefferies, Lake Charles, La., assignor of one-fourth to Mason P. Erwin, Lake Charles, La. Filed October 23, 1929.
- 1,865,210. Electrical Apparatus. William Spencer Purser, London, England, assignor to Columbia Phonograph Co., Inc., Bridgeport, Conn. Filed July 25, 1928, and in Great Britain, September 9, 1927.
- 1,865,271. Radio Receiver. Horace E. Osmun, Harry W. Rubinstein, and Erwin R. Stoekle, Milwaukee, Wis., assignors to Central Radio Laboratories, Milwaukee, Wis. Filed October 17, 1930.
- 1,865,395. Radio Telephonograph. John Bailey Browning, Camden, N. J. Filed April 16, 1925.
- 1,865,421. Hot Cathode Electron Discharge Tube. Hubert M. Freeman East Pittsbufgh, Pa., and Wallace G. Wade, New York,



### Patent Suits

- 1,533,858, L. A. Hazeltine, Method and means for neutralizing capacity coupling in audions, D. C., S.D. N.Y., Doc. E 54/122, Hazeltine Corp. v. General Motors Radio Corp. et al. Consent decree for plaintiff (notice May 4, 1932).
- 1,763,380, 1,798,962, C. E. Trube, Electric coupling system, D.C. S.D. N.Y., Doc. E 59/254, Hazeltine Corp. v. General Motors Radio Corp. Dismissed (notice May 4, 1932).

### Trade-Mark Application Received

Ser. No. 326,372. L. Klein, Inc., Chicago, Ill. Filed April 22, 1932. "GOLD COAST - L. KLEIN-CHICAGO". Applicant disclaims the words "L. Klein - Chicago" apart from the mark as shown in the drawing. The representation of a name plate is disclaimed. For Radio Receiving Sets. Claims use since February 15, 1932.

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