DEPARTMENT OF COMMERCE

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BUREAU OF STANDARDS

No. 138

A DECIMAL CLASSIFICATION OF RADIO SUBJECTS—
AN EXTENSION OF THE DEWEY SYSTEM

MARCH 21, 1923

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AN EXTENSION OF THE DEWEY SYSTEM.

ABSTRACT.

Many workers in the growing field of radio communication have felt the necessity for a systematic scheme of classification which could be used for classifying and filing references to current radio literature as well as other radio material, such as drawings, books, and reports. Several years ago the radio laboratory of the Bureau of Standards felt the need for such a classification in connection with its own work. After some trials it appeared that a decimal system of classification would be very useful for this purpose, thus giving a classification by subject in which the numbers used show not only the relative positions of the material in the files but also the subject matter. The whole subject of radio communication is put in its proper place in the Dewey decimal classification—621.384, but it is suggested that in a purely radio library these figures be abbreviated by the use of the letter “R” as a prefix for the numbers which designate the divisions of the subject—radio communication. The main headings into which the subject of radio are divided are as follows:

R000 Radio communication.
R100 Radio principles.
R200 Radio measurements and standardization.
R300 Radio apparatus and equipment.
R400 Radio communication systems.
R500 Applications of radio.
R600 Radio stations: Equipment, operation, and management.
R700 Radio manufacturing.
(R800) Nonradio subjects.
R900 Miscellaneous radio.

An abbreviated classification is provided for the use of small libraries or collections, and an alphabetical index enables one to refer readily to the classification number of any subject desired.

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I. INTRODUCTION.

1. NEED FOR CLASSIFICATION.

The radio laboratory of the Bureau of Standards has, in common with other workers in the radio field, felt the need for a systematic scheme of classification for subjects in radio science and engineer-
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ing. This need has been felt not only for use in classifying the references to current radio publications but also for classifying other radio material, such as drawings, books, reports, etc. In an effort to fill the need for a radio classification the present extension of the Dewey decimal system has been prepared.

Such a system makes it easy to place books on related subjects near together on the shelves or to file references on the same subject all in the same group and not by the order of their addition to the collection or file. If a classification is to be of the most use any part of it must be capable of expansion, or it must be possible to disregard any part of the classification without interfering with the usefulness of the remaining parts.

2. EXTENSION OF THE DEWEY DECIMAL SYSTEM OF CLASSIFICATION.

Under the Dewey decimal system, of which the present classification is an extension, classification is by subject, numbers being used to show the relative positions of the books, cards, or other material. The numbers, therefore, show both what the material is (that is, its subject matter) and where the material is (that is, its location on the shelves or in the files). In the classification list the indentation and the figures prefixed to each item show the rank of each subject in the classification.

Accompanying the classification is an index which is arranged in the usual alphabetical order. References are made in this index to the subject classification number rather than to pages or to arbitrary shelf numbers. The index is used in determining the number to assign to a given item or material or to learn where to place it in the files. The index is also used by any person desiring to locate the material covering a given subject. The reference number tells him immediately where he will find all material on that and on related subjects.

3. OUTLINE OF CLASSIFICATION.

The whole subject of radio is put in its proper place in the Dewey classification—621.384. The relation of this place to the general field is shown by the following table:

<table>
<thead>
<tr>
<th>Class</th>
<th>Division</th>
<th>Section</th>
<th>Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>600.</td>
<td>20.</td>
<td>1.</td>
<td>Useful arts.</td>
</tr>
<tr>
<td>300.</td>
<td></td>
<td>.300</td>
<td>Electrical.</td>
</tr>
<tr>
<td>.080</td>
<td></td>
<td>.004</td>
<td>Communication.</td>
</tr>
<tr>
<td>.004</td>
<td></td>
<td></td>
<td>Radio.</td>
</tr>
</tbody>
</table>
Decimal Classification of Radio Subjects.

In a strictly radio library or office it is convenient to represent the figure 621.384 by "R," and this abbreviation is used below in the further classification of radio. Thus—

R211 Resonance methods of measuring wave length.
R513 Applications of radio to fog signaling.

II. SUMMARY OF RADIO CLASSIFICATION.

Radio communication is divided into a general class and a number of other classes, as follows:

R000 Radio communication.
R100 Radio principles.
R200 Radio measurements and standardization.
R300 Radio apparatus and equipment.
R400 Radio communication systems.
R500 Applications of radio.
R600 Radio stations: Equipment, operation, and management.
(R800) Nonradio subjects.
R900 Miscellaneous radio.

1. MODIFICATIONS AND VARIATIONS.

While some of the details of the Dewey system seem at the present time to be illogical (for example, electrical engineering a subdivision of mechanical engineering), the system has been widely adopted, and more confusion would result from attempting to change it into a more logical form than results from the arbitrary use of the established practice. In the present classification the Dewey system has been adopted and some of its general features are found specially advantageous. For example, all general material under a given class should be put under the class itself (frequently having a final figure 0). The ninth division under any class is frequently reserved for items which are as yet of too small importance to classify separately. This should not, however, be confused with the first item under each class which is used for general material applied to many or all of the subdivisions under it.

The class (R800) is left vacant for future use. However, in a strictly radio library or office having little material other than radio to classify, it will be found convenient to use this space for nonradio subject matter. Such material should be given its regular class number according to the Dewey system. If it were arranged in strictly numerical order, some of this material would come before radio and some after radio. But by choosing arbitrarily to use the space denoted by (R800) for this purpose it is
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possible to arrange the nonradio material in classified order, but to keep it subordinate to a larger volume of radio material. Thus a number of nonradio items are listed under (R800) in the complete table of class numbers below.

For users having only a small amount of material to classify, an abbreviated classification is suggested. This abbreviated classification is given separately before the main table. Obviously, other items may be added or some of these omitted, depending on the individual needs.

Specific books or papers under a given class or subdivision may be denoted by a small letter, the assignment being according to subject, author, order of accession, or any other consideration depending on the circumstances.

In a card file of references to periodical literature it is convenient to arrange the cards under each final class or subdivision in alphabetical order by the names of subjects or authors.

2. CLASSIFICATION AS TO FORM.

This classification is mainly by subject or content, regardless of form. For material covering a general field an additional form distinction is found practically useful. For classification as to form the following set of numbers may be used in connection with the number corresponding to the subject covered, in every case in which the number so formed has not already been employed for another signification.

The sequence of figures constituting the form number is simply placed to the right of the sequence of figures constituting the class number. If the class number already ends in one or two zeros, as 500 or 510, these zeros are disregarded in making up the combined number. Thus a periodical on any subject has the subject number followed by 05.

Examples:
- R504 Periodicals covering applications of radio.
- R510.4 Periodicals covering applications of radio to navigation.
- R512.04 Periodicals covering radio beacons.
- R512.007 Laws regarding radio beacons.

An example of the form classification is given in the complete table of class numbers under R620, Radio stations, operation and management.

001 Statistics.
002 Quantities; cost.
003 Contracts; specifications.
Decimal Classification of Radio Subjects.

004 Designs; drawings.
005 Executive; administrative; rules.
006 Working; maintenance.
007 Laws; regulations.
008 Patents.
009 Reports of tests; bulletins.
01 Theory; methods; programs.
02 Textbooks; outlines; manuals.
03 Cyclopedias; dictionaries.
04 Essays; addresses; lectures; letters; papers.
05 Periodicals; magazines; reviews; bibliography; publications.
06 Societies; associations; transactions; exhibitions.
07 Education; training; museums.
08 Tables; calculations; charts; maps.
09 History; progress; development; biographical.
Thus R470.9 History of development of wire radio systems.
or R600.3 Contracts for radio stations.

III. ABBREVIATED CLASSIFICATION OF RADIO SUBJECTS.

For small collections or files in which detailed classification is not required, the following abbreviated list of classes may be useful:

R000 RADIO COMMUNICATION.
R050 ----- Publications.
R060 ----- Societies.
R090 ----- History.
R100 ----- Radio principles.
R110 ----- Radio waves.
R120 ----- Antennas.
R130 ----- Electron tubes.
R140 ----- Radio circuits.
R150 ----- Generating apparatus.
R160 ----- Receiving apparatus.
R190 ----- Other radio principles.
R200 ----- Radio measurements and standardization.
R210 ----- Frequency; wave length.
R220 ----- Capacity; dielectric constant.
R230 ----- Inductance.
R240 ----- Resistance; decrement; phase difference; power loss.
R250 ----- Current.
R260 ----- Voltage.
R270 ----- Signal intensity.
R280 ----- Properties of materials.
R290 ----- Other measurements.
R300 ----- Radio apparatus and equipment.
R320 ----- Antennas.
<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>R330</td>
<td>Electron tubes</td>
</tr>
<tr>
<td>R340</td>
<td>Electron tube apparatus</td>
</tr>
<tr>
<td>R350</td>
<td>Generating apparatus; transmitting sets</td>
</tr>
<tr>
<td>R360</td>
<td>Receiving apparatus; receiving sets</td>
</tr>
<tr>
<td>R380</td>
<td>Parts of circuits; instruments</td>
</tr>
<tr>
<td>R400</td>
<td><strong>Radio communication systems.</strong></td>
</tr>
<tr>
<td>R410</td>
<td>Modulated wave systems</td>
</tr>
<tr>
<td>R411</td>
<td>Spark</td>
</tr>
<tr>
<td>R412</td>
<td>Radio telephone systems</td>
</tr>
<tr>
<td>R413</td>
<td>Low-frequency modulating systems</td>
</tr>
<tr>
<td>R414</td>
<td>High-frequency modulating systems</td>
</tr>
<tr>
<td>R420</td>
<td>Continuous wave systems</td>
</tr>
<tr>
<td>R421</td>
<td>High-frequency alternator</td>
</tr>
<tr>
<td>R422</td>
<td>Arc</td>
</tr>
<tr>
<td>R423</td>
<td>Electron tube</td>
</tr>
<tr>
<td>R430</td>
<td>Interference elimination</td>
</tr>
<tr>
<td>R440</td>
<td>Remote control (by wire)</td>
</tr>
<tr>
<td>R450</td>
<td>Linkage</td>
</tr>
<tr>
<td>R460</td>
<td>Duplex and multiplex systems</td>
</tr>
<tr>
<td>R470</td>
<td>Wired radio</td>
</tr>
<tr>
<td>R480</td>
<td>Relay systems</td>
</tr>
<tr>
<td>R490</td>
<td>Other systems</td>
</tr>
<tr>
<td>R500</td>
<td><strong>Applications of radio.</strong></td>
</tr>
<tr>
<td>R510</td>
<td>Navigation</td>
</tr>
<tr>
<td>R520</td>
<td>Aviation</td>
</tr>
<tr>
<td>R530</td>
<td>Commercial and special services</td>
</tr>
<tr>
<td>R540</td>
<td>Private</td>
</tr>
<tr>
<td>R550</td>
<td>Broadcasting</td>
</tr>
<tr>
<td>R560</td>
<td>Military; naval</td>
</tr>
<tr>
<td>R570</td>
<td>Distant control by radio</td>
</tr>
<tr>
<td>R580</td>
<td>Other applications</td>
</tr>
<tr>
<td>R590</td>
<td>National developments</td>
</tr>
<tr>
<td>R600</td>
<td><strong>Radio stations: Equipment, operation, and management.</strong></td>
</tr>
<tr>
<td>R610</td>
<td>Equipment; station descriptions</td>
</tr>
<tr>
<td>R620</td>
<td>Operation and management</td>
</tr>
<tr>
<td>R700</td>
<td><strong>Radio manufacturing.</strong></td>
</tr>
<tr>
<td>R710</td>
<td>Factories</td>
</tr>
<tr>
<td>R720</td>
<td>Processes</td>
</tr>
<tr>
<td>R740</td>
<td>Sales</td>
</tr>
<tr>
<td>R800</td>
<td><strong>Nonradio subjects.</strong></td>
</tr>
<tr>
<td>R900</td>
<td><strong>Miscellaneous radio</strong></td>
</tr>
</tbody>
</table>
IV. COMPLETE TABLE OF CLASS NUMBERS.

(The numbers marked with an asterisk (*) are not found in the Dewey decimal classification, but are inserted here for convenience.)

<table>
<thead>
<tr>
<th>Class Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>R000</td>
<td>RADIO COMMUNICATION</td>
</tr>
<tr>
<td>R001</td>
<td>Statistics</td>
</tr>
<tr>
<td>R003</td>
<td>Contracts</td>
</tr>
<tr>
<td>R004</td>
<td>Design</td>
</tr>
<tr>
<td>R005</td>
<td>Executive; administrative; personnel.</td>
</tr>
<tr>
<td>R006</td>
<td></td>
</tr>
<tr>
<td>R007</td>
<td>Laws; Regulations</td>
</tr>
<tr>
<td>R007.1</td>
<td>United States laws and regulations.</td>
</tr>
<tr>
<td>R007.2</td>
<td>United States radio inspection service.</td>
</tr>
<tr>
<td>R007.3</td>
<td></td>
</tr>
<tr>
<td>R007.4</td>
<td>Canada</td>
</tr>
<tr>
<td>R007.5</td>
<td>British Empire (except Canada).</td>
</tr>
<tr>
<td>R007.6</td>
<td>France</td>
</tr>
<tr>
<td>R007.7</td>
<td>Germany</td>
</tr>
<tr>
<td>R007.8</td>
<td>Other countries</td>
</tr>
<tr>
<td>R007.9</td>
<td>International conferences.</td>
</tr>
<tr>
<td>R008</td>
<td>Patent specifications.</td>
</tr>
<tr>
<td>R009</td>
<td>Reports; bulletins</td>
</tr>
<tr>
<td>R010</td>
<td>Research</td>
</tr>
<tr>
<td>R020</td>
<td>Textbooks</td>
</tr>
<tr>
<td>R030</td>
<td>Terminology; symbols</td>
</tr>
<tr>
<td>R040</td>
<td>Lectures</td>
</tr>
<tr>
<td>R050</td>
<td>Publications</td>
</tr>
<tr>
<td>R051</td>
<td>Books</td>
</tr>
<tr>
<td>R053</td>
<td>Periodicals</td>
</tr>
<tr>
<td>R055</td>
<td>Bibliography</td>
</tr>
<tr>
<td>R060</td>
<td>Societies; meetings</td>
</tr>
<tr>
<td>R070</td>
<td>Education; training</td>
</tr>
<tr>
<td>R071</td>
<td>Courses of study</td>
</tr>
<tr>
<td>R073</td>
<td>Training of operators</td>
</tr>
<tr>
<td>R080</td>
<td>Collections, tables, miscellanies.</td>
</tr>
<tr>
<td>R081</td>
<td>Tables</td>
</tr>
<tr>
<td>R082</td>
<td>Nomograms</td>
</tr>
<tr>
<td>R083</td>
<td>Humor</td>
</tr>
<tr>
<td>R084</td>
<td>Maps and charts</td>
</tr>
<tr>
<td>R090</td>
<td>History</td>
</tr>
<tr>
<td>R090.1</td>
<td>United States</td>
</tr>
<tr>
<td>R090.2</td>
<td>British Empire</td>
</tr>
<tr>
<td>R090.3</td>
<td>France</td>
</tr>
<tr>
<td>R090.4</td>
<td>Germany; Austria</td>
</tr>
</tbody>
</table>

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R090. 5 Italy; Spain; Portugal.
R090. 6 Norway; Sweden; Denmark.
R090. 7 Asia; Africa.
R090. 8 South America.
R090. 9 Other countries.
R091 Radio telegraphy.
R094 Radio telephony.
R097 Biographical.
R100 Radio principles.
R110 Radio waves.
R111 Electromagnetic theory.
R112. 1 Radiation.
R112. 6 Absorption (reception).
R113 Transmission phenomena.
R113. 1 Fading.
R113. 2 Daily variations; seasonal variations.
R113. 3 Directional variations.
R113. 4 Ionization; Heaviside layer.
R113. 5 Meteorological.
R113. 55 Tropical radio.
R113. 6 Reflection; refraction; diffraction.
R113. 7 Transmission formulas; range.
R113. 8 Eclipses.
R113. 9 Wave front angle.
R114 Strays.
R115 Directional properties.
R116 Waves on wires.
R120 Antennas.
R121 Condenser type antennas (ordinary elevated type) with ground.
R122 Condenser type antennas (ordinary elevated type) with counterpoise.
R123 Ground and underground antennas.
R124 Coil antennas.
R125. 1 Direction finding.
R125. 6 Directive antennas (transmitting in a particular direction).
R126 Ground connections.
R127 Antenna constants.
R128 Special types.
R130 Electron tubes.
R130. 3 Nomenclature.
R130. 4 Principles of design.
R131 Characteristic curves; general properties.
Decimal Classification of Radio Subjects.

R132 Amplifying action.
R132. 1 Inductive coupling.
R132. 2 Capacitive coupling.
R132. 3 Resistance coupling.
R133 Generating action.
R134 Detector action.
R134. 4 Regenerative action.
R134. 45 Superregenerative action.
R134. 5
R134. 6
R134. 7 Heterodyne, autodyne.
R134. 75 Superheterodyne.
R134. 8 Reflex action.
R135 Modulating action.
R136 Input impedance.
R137 Output impedance.
R138 Electron emission; ionization.
R139 Other electron tube principles.
R140 Radio circuits.
R141 Simple radio circuits.
R141. 1 Frequency.
R141. 2 Resonance.
R141. 3 Impulse excitation.
R142 Coupled circuits.
R142. 1 Direct coupling.
R142. 3 Inductive coupling.
R142. 5 Capacitive coupling.
R143 Damping; decrement.
R144 High-frequency resistance.
R145 Reactance.
R145. 3 Inductance.
R145. 5 Capacity.
R146 Harmonics.
R147 Beats.
R148 Modulation.
R148. 1 Distortion.
R149 Rectification.
R150 Generating apparatus.
R151
R152 Spark gaps.
R153 Arcs.
R154 Alternators.
R155
R156 Transformers.
R160 Receiving apparatus.
R161 Sensitivity.
R162 Selectivity.
R170
R180
R190 Other radio principles.
R200 Radio measurements and standardization.
R201 General methods and apparatus.
R201.2 Uses of electron tubes in radio measurements.
R201.5 Shielding and grounding.
R201.6 High-frequency bridge.
R201.7 Use of high-frequency oscillograph.
R202 Resonance methods.
R203 Harmonic methods.
R204 Null methods.
R205 Substitution methods.
R210 Frequency; wave length.
R211 Resonance methods.
R212
R213 Harmonic methods.
R220 Capacity.
R220.1 Capacity meters.
R223 Dielectric constant.
R225 Capacity of coils.
R230 Inductance.
R231 Self inductance.
R235 Mutual inductance.
R240 Resistance; decrement; phase difference; power loss.
R241 Resistance-variation method.
R242 Reactance-variation method.
R243 Substitution method.
R244 Calorimeter methods. (See also 536.6.)
R250 Current.
R251 Ammeters.
R251.1 Hot-wire.
R251.2 Thermoelement.
R251.3 Current transformer.
R251.4 Electrodynamometer.
R251.5 Einthoven galvanometer.
R251.6 Bolometer bridge.
R260 Voltage.
R261 Electron tube voltmeters.
R262 Sparking distance.
R263 Electrostatic voltmeters.
R264
R265
R266
Decimal Classification of Radio Subjects.

R267
R268
R269 Other voltmeters for radio frequencies.
R270 Signal intensity.
R271 Shunted telephone method.
R272 Audio-frequency comparison method.
R273 Radio-frequency comparison method.
R274
R275 Modulation.
R280 Properties of materials.
R281 Electrical insulating materials.
R281.1 Laminated.
R281.11 Phenolic binders.
R281.12 Shellac binders.
R281.13 Fiber.
R281.2 Molded.
R281.21 Phenolic binders.
R281.22 Shellac binders.
R281.23 Pitch binders.
R281.31 Porcelain.
R281.33 Glass.
R281.35 Rubber.
R281.37 Gutta-percha.
R281.38 Mica.
R281.383 Built-up mica.
R281.41 Textiles.
R281.42 Paper.
R281.426 Pulpboard.
R281.43 Wood.
R281.44 Wax.
R281.45 Pitch.
R281.46 Paraffin.
R281.47 Varnish.
R281.48 Shellac.
R281.49 Oil.
R281.60 Resins.
R281.61 Natural resins.
R281.65 Synthetic resins.
R281.70
R281.71 Quartz.
R281.72 Marble.
R281.73 Granite.
R281.74 Slate.
R281.75 Lava.
R281.76 Asbestos.
R281. 77 .......... Sulphur.
R281. 78 .......... Amber.
R281. 79 .......... Celluloid.
R281. 80 .......... Cellulose esters.
R281. 81 .......... Oxide coatings.
R281. 82 .......... Vitrified clay products.
R281. 83 .......... Casein products.
R281. 9 .......... Miscellaneous insulating materials.
R282 .......... Electrolytes.
R283 .......... Magnetic materials.
R284 .......... Conductors.
R284. 1 .......... Metals.
R284. 11 .......... Copper.
R284. 13 .......... Tungsten.
R284. 3 .......... Pyroelectric.
R290 .......... Other measurements.
R300 .......... Radio apparatus and equipment.
R300. 4 .......... Design.
R300. 5 .......... Engineering precautions.
R300. 6 .......... Kick-back prevention.
R301 .......... Antennas.
R302 .......... Photographs of radio apparatus.
R303 .......... Exhibitions.
R304 .......... Laboratories.
R305 .......... Stockrooms.
R310 .......... Antennas.
R320 .......... Antenna switches.
R320. 6 .......... Towers.
R321 .......... Condenser type antennas (ordinary elevated type) with ground.
R322 .......... Condenser type antennas (ordinary elevated type) with counterpoise.
R323 .......... Ground and underground antennas.
R324 .......... Coil antennas.
R325. 1 .......... Direction finders.
R325. 6 .......... Directive antennas (transmitting in a particular direction).
R326 .......... Ground connections.
R327 .......... Artificial antennas.
R328 .......... Multiple-tuned antennas.
R329 Special types of antennas. (For airplane antennas see R525.)
R330 Electron tubes.
R330. 4 Design.
R330. 6 Priority; controversial.
R330. 9 History.
R331 Construction; evacuation. (See also Vacuum pumps, 533.85.)
R332 Two-electrode.
R332. 3 Regulator tubes.
R333 Three-electrode.
R334 Four-electrode.
R340 Electron tube apparatus.
R341 Detectors; rectifiers.
R342 Amplifiers.
R342. 1 Inductive coupling.
R342. 15 Amplifier transformer.
R342. 2 Resistance coupling.
R342. 3 Capacitive coupling.
R342. 4
R342. 5 Power amplifier.
R342. 6 Radio-frequency amplifiers.
R342. 7 Audio-frequency amplifiers.
R343 Electron tube receiving sets.
R343. 5 Heterodyne sets.
R343. 7 Alternating-current supply.
R344 Electron tube generators.
R344. 3 Transmitting sets.
R344. 4 Short-wave generators.
R344. 5 Alternating-current supply.
R344. 6 Large-current generators.
R344. 7 Harmonic generators; multivibrators.
R345 Modulators.
R346 Radio telephone sets (electron tube).
R347
R348 Use in wire systems.
R350 Generating apparatus; transmitting sets.
R351 Simple oscillators.
R352 Spark gaps. (See also R411.)
R352. 2 Quenched.
R352. 4 Rotary, synchronous.
R352. 6 Rotary, nonsynchronous.
R352. 8 Timed spark.
R353 Arc converters. (See also R422.)
R354 High-frequency alternators. (See also R421.)
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R355 High-voltage generators.
R356 Transformers.
R356. 3 Resonance transformers.
R356. 5 Induction coils.
R357 Frequency changers.
R358 Protective devices.
R359 Automatic transmitters.
R360 Receiving sets.
R370 Receiving apparatus.
R371
R372
R373 Amplifiers. (For electron-tube amplifiers see R342.)
R373. 1 Magnetic.
R373. 2 Microphone.
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R390        Radiocommunication systems.
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R411. 2      Quenched.
R411. 4      Rotary, synchronous.
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V. ACKNOWLEDGMENTS.

The general scheme used in the above classification follows the decimal classification and relative index of Melvil Dewey, published by the Forest Press, Lake Placid, N. Y. An extension of the Dewey decimal system of classification applied to engineering industries by L. P. Breckenridge and G. A. Goodenough has been issued by the University of Illinois Engineering Experiment Station as Bulletin No. 9 (1912). Both the Dewey classification and the University of Illinois extension give a short classification of radio communication, but the recent advances in this subject have caused it to outgrow these limitations. Valuable criticism of a preliminary radio subject classification have been received from Arthm: Bessey Smith and Harrison W. Craver, and it is partly owing to their recommendation and to the widespread use of the Dewey system that the decimal classification has been adopted. Attention is also called to a "Proposed classification for an engineering library" published in the Transactions of the American Society of Civil Engineers, volume 82, page 1618, December, 1918. The classification there proposed is decimal in form but departs quite radically from the Dewey system. The classification of radio there is very meager.

VI. INDEX TO RADIO CLASSIFICATION.

To use this index, find the subject desired in its alphabetical place in the following list. The number after it is its class number, and refers to the place where the topic will be found, in numerical order of class numbers, on the shelves or in the subject catalogs.

All class numbers are decimals; that is, R251.1, Hot-wire ammeters, comes before R260, Voltage measurements. Labels on the shelves, drawer fronts, or cards guide readily to the class number sought.

Under this class number will be found the resources of the library on the subject desired. Other subjects near the one sought may often be consulted with profit; for example, Electron tubes
is the topic wanted and the index refers to R330, but R340, Electron-tube apparatus, also contains much on the subject of electron tubes, as well.

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