94.1 **MOLECULAR OR PARTICLE RESONANT TYPE (E.G., MASER)**
1 R **AUTOMATIC FREQUENCY STABILIZATION USING A PHASE OR FREQUENCY SENSING MEANS**
2 .Plural oscillators controlled
3 .Molecular resonance stabilization
4 .Search sweep of oscillator
5 .Magnetron oscillator
6 .Klystron oscillator
7 ..Plural controls
8 .Transistorized controls
9 .Oscillator with distributed parameter-type discriminator
10 .Plural A.F.S. for a single oscillator
11 ..Plural comparators or discriminators
12 ...With phase-shifted inputs
13 ..Motor control of oscillator
14 .With intermittent comparison controls
15 .Amplitude compensation
16 .Tuning compensation
17 .Particular error voltage control (e.g., intergrating network)
18 .With reference oscillator or source
19 ..Spectrum reference source
20 ..T.V. sync type
21 ...Lock to power line
22 ..Plural significant heterodyne stages
23 ..Sensing modulation (e.g., frequency modulation controlled oscillator
24 ...With motor comparator
25 ..Signal or phase comparator
26 ...Plural diode type
27 ...Plural active element (e.g., triodes)
28 ...Unilateral element (e.g., diode)
29 ...Electromechanical
30 .With stable heterodyne oscillator or source
31 ..Plural significant heterodyne stages
32 ..With particular discriminator (e.g., LPF and HPF)
33 ...Plural diode type
34 .Particular frequency control means
35 ..Electromechanical (e.g., motor)
36 R ..Reactance device (e.g., variable capacitors, saturable inductors, reactance tubes, etc.)
36 C ...Capacitor controlled AFC
36 L ...Inductor controlled AFC
1 A .AFC with logic elements
37 **BEAT FREQUENCY**
38 .Plural beating
39 ..Single channel
40 .Frequency or amplitude adjustment or control
41 .Frequency stabilization
42 .With particular signal combining means (e.g., cavity mixer)
43 ..With filter in mixer output circuit
44 **WITH FREQUENCY CALIBRATION OR TESTING**
45 **POLYPHASE OUTPUT**
46 **PLURAL OSCILLATORS**
47 .Oscillator used to vary amplitude or frequency of another oscillator
48 .Adjustable frequency
49 .Selectively connected to common output or oscillator substitution
50 .Cascade or tandem connected
51 ..Frequency dividers
52 ..Semiconductor (e.g., transistor)
53 ..Frequency multiplier
54 ..Diverse-type oscillators
55 .Synchronized, triggered or pulsed
56 .Parallel connected
57 **RING OSCILLATORS**
58 **PLURAL FUNCTIONS SIMULTANEOUSLY**
59 **CONVERTIBLE (E.G., OSCILLATOR TO AMPLIFIER, ETC.)**
60 **SINGLE OSCILLATOR WITH PLURAL OUTPUT CIRCUITS**
61 .Plural outputs of diverse wave form
62 **WITH OSCILLATOR CIRCUIT PROTECTIVE MEANS**
63 **PROTECTIVE OF SAFETY DEVICES FOR PERSONNEL**
64 **WITH INDICATOR, SIGNAL, OR ALARM**

65 **WITH DEVICE RESPONSIVE TO EXTERNAL PHYSICAL CONDITION**
66 .Temperature or light responsive
67 **WITH ELECTROMAGNETIC OR ELECTROSTATIC SHIELD**
68 **WITH OUTER CASING OR HOUSING**
69 .With temperature modifier
70 **WITH TEMPERATURE MODIFIER**
71 **RAW A.C. USED AS SOURCE OF POWER OR BIAS**
72 **ELECTRON-COUPLED TYPE**
73 .Piezoelectric crystal resonator
74 **COMBINED WITH PARTICULAR OUTPUT COUPLING NETWORK**
75 .Space discharge or unilaterally conductive device in output network
76 ..Harmonic producing or selecting network
77 .Wave filter
78 **ELECTRICAL NOISE OR RANDOM WAVE GENERATOR**
79 **BEAM TUBE**
80 .With beam sweeping or deflecting means
81 .With electron bunching or velocity variation means
82 ..Traveling wave type
83 ..Multicavity type (e.g., Klystron)
84 ..Reflex type (i.e., with repeller electrode)
86 **WITH MAGNETICALLY CONTROLLED SPACE DISCHARGE DEVICE (E.G., MAGNETRON)**
87 .With particular pulsing means
88 .With frequency stabilization
89 .With secondary emissive electrode
90 .With frequency adjustment
91 .With undesired mode suppression or selection means
92 **RETARDING FIELD TUBE-TYPE OSCILLATORS (E.G., BARKHAUSEN KURZ)**
93 .With distributed parameter resonator
95 **BUTTERFLY RESONATOR**
96 **WITH DISTRIBUTED PARAMETER RESONATOR**
97 .Tube enclosed by resonator structure
98 ..Disk seal tube (e.g., lighthouse, pencil tube)
99 .Parallel wire type
100 ..Push-pull type
101 .Coaxial or shielded line type
102 ..Push-pull type
103 **TUBE STRUCTURE FORMS INDUCTIVE PART OF RESONANT CIRCUIT**
104 **TRANSIT TIME OSCILLATOR**
105 **WITH PARASITIC OSCILLATION CONTROL OR PREVENTION MEANS**
106 **WITH PERIODOIC OR REPETITIOUS AMPLITUDE VARYING MEANS (E.G., TREMOLO)**
107 R **SOLID STATE ACTIVE ELEMENT OSCILLATOR**
108 R .Transistors
109 ..Amplitude stabilization and control
110 ..Bridge type
111 ..Relaxation oscillator
112 ...Blocking oscillator type
113 R ...Multivibrator type
113 A ....Saturable core controlled converters
113 S ....Converter using silicon control rectifiers
114 ..Push-pull
115 ..Negative resistance
116 R ..Electromechanical resonator controlled
116 FE ...Field-effect transistor active element
116 M ...Electromechanical resonators other than piezoelectric crystals
117 R ..L-C type
117 FE ...Field-effect transistor active element
117 D ...Distributed parameter resonator transistor oscillators
108 A ..Use of complimentary-type transistors
108 B ..Phase shift oscillator
108 C ..Integrated circuit oscillators
108 D ..Integrated modules with discrete elements oscillators
107 DP .Significant distributed parameter resonator (e.g., cavity)
107 P ..Parallel-connected oscillator devices

107 SL ..Stripline type
107 C ..Coaxial type
107 A .Acoustoelectric device oscillators
107 G .Gunn-type bulk effect device oscillators
107 S .Superconductive device oscillators
107 T .Tunnel diode oscillators
126 **GASEOUS SPACE DISCHARGE DEVICE**
127 .Spark or open arc type
128 .Drives shock excited L.C. circuit
129 .Relaxation oscillator
130 ..Plural gaseous devices
131 ..Discharge device or rectifier in "C" or "L" charging or discharging circuit
132 **NEGATIVE RESISTANCE OR NEGATIVE TRANSCONDUCTANCE OSCILLATOR**
133 .Secondary emission (e.g., dynatron)
134 .Transitron type
135 **PHASE SHIFT TYPE**
136 .Zero phase shift
137 .With R.C. ladder-type phase shift network
138 **BRIDGE TYPE**
139 .Piezoelectric crystal in bridge
140 .R.C. or R.L. type
141 ..Wien bridge
142 ..Double T bridge
143 **RELAXATION OSCILLATORS**
144 .Multivibrators
145 ..With sync, triggering or pulsing circuit
146 .Blocking oscillators
147 ..Using discharge device with plural grids
148 ..With 3 or more winding feedback transformers
149 ..With sync, trigger, or pulsing circuit (e.g., self-pulsing)
150 .Output supplied to another discharge device circuit
151 .Involving resonant or inductive wave forming circuit or transformer
152 .Multi-grid discharge device in charged capacitor circuit
153 .With sync, trigger or pulsing circuit
154 **ELECTROMECHANICAL RESONATOR**
155 .With optical, piezoelectric or acoustic coupling means
156 .Vibrating reed or string type (e.g., tuning fork)
157 .Magnetostrictive
158 .Crystal
159 ..Plural tube
160 ..With means to limit crystal current or voltage
161 ..With crystal substitution
162 ..Plural crystals in circuit
163 ..Crystal having three or more electrodes in circuit
164 ..Anode or cathode to grid crystal circuit
165 **SHOCK EXCITED RESONANT CIRCUIT**
166 .With keying means of the active element type (e.g., burst generator)
167 **L-C TYPE OSCILLATORS**
168 .Plural tubes
169 .Anode to cathode coupled or connected resonant circuit
170 .Anode to grid coupled or connected resonant circuit
171 .Grid to cathode coupled or connected resonant circuit
172 **WITH SYNCHRONIZING, TRIGGERING OR PULSING CIRCUITS**
173 .Triggering or pulsing (e.g., burst generators)
174 ..Self-quenched
175 **FREQUENCY STABILIZATION**
176 .Temperature or current responsive means in circuit
177 R **WITH FREQUENCY ADJUSTING MEANS**
178 .Cyclic frequency sweeping means (e.g., vibrato)
179 .Step-frequency change (e.g., band selection, frequency-shift keying)
180 .Reactance tube type
181 .Variable inductance device (e.g., saturable core or adjustable vane inductor)
177 V .With voltage sensitive capacitor
182 **AMPLITUDE CONTROL OR STABILIZATION**
183 .Automatic
184 **HAVING DISCHARGED DEVICE OR PARTICULAR CONSTRUCTION**
185 **WITH PARTICULAR SOURCE OF POWER OR BIAS VOLTAGE**
186 .Regulated
187 **MISCELLANEOUS OSCILLATOR STRUCTURES**

FOREIGN ART COLLECTIONS

FOR 000 **CLASS-RELATED FOREIGN DOCUMENTS**

DIGESTS

DIG 2 **PHASE LOCKED LOOP HAVING LOCK INDICATING OR DETECTING MEANS**

DIG 3 **LOGIC GATE ACTIVE ELEMENT OSCILLATOR**