| Symbol | Typ | Titel |
|---|---|---|
| **H** | **Sektion** | **SECTION H — ELECTRICITY** |
| **H03** | **Klasse** | **BASIC ELECTRONIC CIRCUITRY** |
| **H03B** | **Unterklasse** | **GENERATION OF OSCILLATIONS, DIRECTLY OR BY FREQUENCY-CHANGING, BY CIRCUITS EMPLOYING ACTIVE ELEMENTS WHICH OPERATE IN A NON-SWITCHING MANNER; GENERATION OF NOISE BY SUCH CIRCUITS (measuring, testing G01R; generators adapted for electrophonic musical instruments G10H; speech synthesis G10L 13/00; masers, lasers H01S; dynamo-electric machines H02K; power inverter circuits H02M; by using pulse techniques H03K; automatic control of generators H03L; starting, synchronisation or stabilisation of generators where the type of generator is irrelevant or unspecified H03L; generation of oscillations in plasma H05H)** |
| **H03B 1/00** | **Hauptgruppe** | **Details** |
| H03B 1/02 | 1-Punkt Untergruppe | . Structural details of power oscillators, e.g. for heating |
| H03B 1/04 | 1-Punkt Untergruppe | . Reducing undesired oscillations, e.g. harmonics |
| **H03B 5/00** | **Hauptgruppe** | **Generation of oscillations using amplifier with regenerative feedback from output to input (H03B 9/00, H03B 15/00 take precedence)** |
| H03B 5/02 | 1-Punkt Untergruppe | . Details |
| H03B 5/04 | 2-Punkt Untergruppe | . . Modifications of generator to compensate for variations in physical values, e.g. power supply, load, temperature |
| H03B 5/06 | 2-Punkt Untergruppe | . . Modifications of generator to ensure starting of oscillations |
| H03B 5/08 | 1-Punkt Untergruppe | . with frequency-determining element comprising lumped inductance and capacitance |
| H03B 5/10 | 2-Punkt Untergruppe | . . active element in amplifier being vacuum tube (H03B 5/14 takes precedence) |
| H03B 5/12 | 2-Punkt Untergruppe | . . active element in amplifier being semiconductor device (H03B 5/14 takes precedence) |
| H03B 5/14 | 2-Punkt Untergruppe | . . frequency-determining element connected via bridge circuit to closed ring around which signal is transmitted |
| H03B 5/16 | 3-Punkt Untergruppe | . . . active element in amplifier being vacuum tube |
| H03B 5/18 | 1-Punkt Untergruppe | . with frequency-determining element comprising distributed inductance and capacitance |
| H03B 5/20 | 1-Punkt Untergruppe | . with frequency-determining element comprising resistance and either capacitance or inductance, e.g. phase-shift oscillator |
| H03B 5/22 | 2-Punkt Untergruppe | . . active element in amplifier being vacuum tube (H03B 5/26 takes precedence) |
| H03B 5/24 | 2-Punkt Untergruppe | . . active element in amplifier being semiconductor device (H03B 5/26 takes precedence) |
| H03B 5/26 | 2-Punkt Untergruppe | . . frequency-determining element being part of bridge circuit in closed ring around which signal is transmitted; frequency-determining element being connected via a bridge circuit to such a closed ring, e.g. Wien-Bridge oscillator, parallel-T oscillator |
| H03B 5/28 | 3-Punkt Untergruppe | . . . active element in amplifier being vacuum tube |
| H03B 5/30 | 1-Punkt Untergruppe | . with frequency-determining element being electromechanical resonator |
| H03B 5/32 | 2-Punkt Untergruppe | . . being a piezo-electric resonator (piezo-electric elements in general H01L 41/00) |
| H03B 5/34 | 3-Punkt Untergruppe | . . . active element in amplifier being vacuum tube (H03B 5/38 takes precedence) |
| H03B 5/36 | 3-Punkt Untergruppe | . . . active element in amplifier being semiconductor device (H03B 5/38 takes precedence) |

| Symbol | Typ | Titel |
|---|---|---|
| H03B 5/38 | 3-Punkt Untergruppe | . . . frequency-determining element being connected via bridge circuit to closed ring around which signal is transmitted |
| H03B 5/40 | 2-Punkt Untergruppe | . . being a magnetostrictive resonator (H03B 5/42 takes precedence; magnetostrictive elements in general H01L 41/00) |
| H03B 5/42 | 2-Punkt Untergruppe | . . frequency-determining element connected via bridge circuit to closed ring around which signal is transmitted |
| **H03B 7/00** | **Hauptgruppe** | **Generation of oscillations using active element having a negative resistance between two of its electrodes (H03B 9/00 takes precedence)** |
| H03B 7/02 | 1-Punkt Untergruppe | . with frequency-determining element comprising lumped inductance and capacitance |
| H03B 7/04 | 2-Punkt Untergruppe | . . active element being vacuum tube |
| H03B 7/06 | 2-Punkt Untergruppe | . . active element being semiconductor device |
| H03B 7/08 | 3-Punkt Untergruppe | . . . being a tunnel diode |
| H03B 7/10 | 2-Punkt Untergruppe | . . active element being gas-discharge or arc-discharge tube |
| H03B 7/12 | 1-Punkt Untergruppe | . with frequency-determining element comprising distributed inductance and capacitance |
| H03B 7/14 | 2-Punkt Untergruppe | . . active element being semiconductor device |
| **H03B 9/00** | **Hauptgruppe** | **Generation of oscillations using transit-time effects [2]** |
| H03B 9/01 | 1-Punkt Untergruppe | . using discharge tubes [2] |
| H03B 9/02 | 2-Punkt Untergruppe | . . using a retarding-field tube (using klystrons H03B 9/04) [2] |
| H03B 9/04 | 2-Punkt Untergruppe | . . using a klystron [2] |
| H03B 9/06 | 3-Punkt Untergruppe | . . . using a reflex klystron [2] |
| H03B 9/08 | 2-Punkt Untergruppe | . . using a travelling-wave tube [2] |
| H03B 9/10 | 2-Punkt Untergruppe | . . using a magnetron [2] |
| H03B 9/12 | 1-Punkt Untergruppe | . using solid state devices, e.g. Gunn-effect devices [2] |
| H03B 9/14 | 2-Punkt Untergruppe | . . and elements comprising distributed inductance and capacitance [3] |
| **H03B 11/00** | **Hauptgruppe** | **Generation of oscillations using a shock-excited tuned circuit (with feedback H03B 5/00)** |
| H03B 11/02 | 1-Punkt Untergruppe | . excited by spark (spark gaps therefor H01T 9/00) |
| H03B 11/04 | 1-Punkt Untergruppe | . excited by interrupter |
| H03B 11/06 | 2-Punkt Untergruppe | . . by mechanical interrupter |
| H03B 11/08 | 2-Punkt Untergruppe | . . interrupter being discharge tube |
| H03B 11/10 | 2-Punkt Untergruppe | . . interrupter being semiconductor device |
| **H03B 13/00** | **Hauptgruppe** | **Generation of oscillations using deflection of electron beam in a cathode-ray tube** |
| **H03B 15/00** | **Hauptgruppe** | **Generation of oscillations using galvano-magnetic devices, e.g. Hall-effect devices, or using super-conductivity effects (galvano-magnetic devices per seH01L 43/00)** |
| **H03B 17/00** | **Hauptgruppe** | **Generation of oscillations using radiation source and detector, e.g. with interposed variable obturator** |
| **H03B 19/00** | **Hauptgruppe** | **Generation of oscillations by non-regenerative frequency multiplication or division of a signal from a separate source (transference of modulation from one carrier to another H03D 7/00)** |

| Symbol | Typ | Titel |
|---|---|---|
| H03B 19/03 | 1-Punkt Untergruppe | . using non-linear inductance [3] |
| H03B 19/05 | 1-Punkt Untergruppe | . using non-linear capacitance, e.g. varactor diodes [3] |
| H03B 19/06 | 1-Punkt Untergruppe | . by means of discharge device or semiconductor device with more than two electrodes |
| H03B 19/08 | 2-Punkt Untergruppe | . . by means of a discharge device |
| H03B 19/10 | 3-Punkt Untergruppe | . . . using multiplication only |
| H03B 19/12 | 3-Punkt Untergruppe | . . . using division only |
| H03B 19/14 | 2-Punkt Untergruppe | . . by means of a semiconductor device |
| H03B 19/16 | 1-Punkt Untergruppe | . using uncontrolled rectifying devices, e.g. rectifying diodes or Schottky diodes [3] |
| H03B 19/18 | 2-Punkt Untergruppe | . . and elements comprising distributed inductance and capacitance [3] |
| H03B 19/20 | 2-Punkt Untergruppe | . . being diodes exhibiting charge storage or enhancement effects [3] |
| **H03B 21/00** | **Hauptgruppe** | **Generation of oscillations by combining unmodulated signals of different frequencies (H03B 19/00 takes precedence; frequency changing circuits in general H03D) [3]** |
| H03B 21/01 | 1-Punkt Untergruppe | . by beating unmodulated signals of different frequencies [3] |
| H03B 21/02 | 2-Punkt Untergruppe | . . by plural beating, i.e. for frequency synthesis [3] |
| H03B 21/04 | 2-Punkt Untergruppe | . . using several similar stages [3] |
| **H03B 23/00** | **Hauptgruppe** | **Generation of oscillations periodically swept over a predetermined frequency range (angle-modulating circuits in general H03C 3/00)** |
| **H03B 25/00** | **Hauptgruppe** | **Simultaneous generation by a free-running oscillator of oscillations having different frequencies** |
| **H03B 27/00** | **Hauptgruppe** | **Generation of oscillations providing a plurality of outputs of the same frequency but differing in phase, other than merely two anti-phase outputs** |
| **H03B 28/00** | **Hauptgruppe** | **Generation of oscillations by methods not covered by groups H03B 5/00-H03B 27/00, including modification of the waveform to produce sinusoidal oscillations (analogue function generators for performing computing operations G06G 7/26; use of transformers for conversion of waveform in ac-ac converters H02M 5/18) [4]** |
| **H03B 29/00** | **Hauptgruppe** | **Generation of noise currents and voltages** |