

SECTION H — ELECTRICITY

H03 BASIC ELECTRONIC CIRCUITRY

H03D DEMODULATION OR TRANSFERENCE OF MODULATION FROM ONE CARRIER TO ANOTHER (masers, lasers H01S; circuits capable of acting both as modulator and demodulator H03C; details applicable to both modulators and frequency-changers H03C; demodulating pulses H03K 9/00; transforming types of pulse modulation H03K 11/00; coding, decoding or code conversion, in general H03M; repeater stations H04B 7/14; demodulators adapted for digitally modulated-carrier systems H04L 27/00; synchronous demodulators adapted for colour television H04N 9/66)

Note(s)

This subclass covers only:

- demodulation or transference of signals modulated on a sinusoidal carrier or on electromagnetic waves;
- comparing phase or frequency of two mutually-independent oscillations.

Subclass index

DEMODULATION

Amplitude; angle; combined; super-regenerative.....	1/00, 3/00, 5/00, 9/00, 11/00
TRANSFERENCE.....	7/00, 9/00
COMPARING PHASE OR FREQUENCY.....	13/00
SUBJECT MATTER NOT PROVIDED FOR IN OTHER GROUPS OF THIS SUBCLASS.....	99/00

1/00 Demodulation of amplitude-modulated oscillations (H03D 5/00, H03D 9/00, H03D 11/00 take precedence)	3/06	• • by combining signals additively or in product demodulators
1/02 • Details	3/08	• • • by means of diodes, e.g. Foster-Seeley discriminator
1/04 • • Modifications of demodulators to reduce interference by undesired signals	3/10	• • • • in which the diodes are simultaneously conducting during the same half period of the signal, e.g. ratio detector
1/06 • • Modifications of demodulators to reduce distortion, e.g. by negative feedback	3/12	• • • by means of discharge tubes having more than two electrodes
1/08 • by means of non-linear two-pole elements (H03D 1/22, H03D 1/26, H03D 1/28 take precedence)	3/14	• • • by means of semiconductor devices having more than two electrodes
1/10 • • of diodes	3/16	• • • by means of electromechanical resonators
1/12 • • • with provision for equalising ac and dc loads	3/18	• • by means of synchronous gating arrangements
1/14 • by means of non-linear elements having more than two poles (H03D 1/22, H03D 1/26, H03D 1/28 take precedence)	3/20	• • • producing pulses whose amplitude or duration depends on the phase difference
1/16 • • of discharge tubes	3/22	• • by means of active elements with more than two electrodes to which two signals are applied derived from the signal to be demodulated and having a phase difference related to the frequency deviation, e.g. phase detector
1/18 • • of semiconductor devices	3/24	• • Modifications of demodulators to reject or remove amplitude variations by means of locked-in oscillator circuits
1/20 • • with provision for preventing undesired type of demodulation, e.g. preventing anode detection in a grid detection circuit	3/26	• by means of sloping amplitude/frequency characteristic of tuned or reactive circuit (H03D 3/28-H03D 3/32 take precedence)
1/22 • Homodyne or synchrodyne circuits	3/28	• Modifications of demodulators to reduce effect of temperature variations (automatic frequency control H03L)
1/24 • • for demodulation of signals wherein one sideband or the carrier has been wholly or partially suppressed	3/30	• by means of transit-time tubes
1/26 • by means of transit-time tubes	3/32	• by deflecting an electron beam in a discharge tube (H03D 3/30 takes precedence)
1/28 • by deflecting an electron beam in a discharge tube (H03D 1/26 takes precedence)	3/34	• by means of electromechanical devices (H03D 3/16 takes precedence) [3]
3/00 Demodulation of angle-modulated oscillations (H03D 5/00, H03D 9/00, H03D 11/00 take precedence)		
3/02 • by detecting phase difference between two signals obtained from input signal (H03D 3/28-H03D 3/32 take precedence; limiting arrangements H03G 11/00)		
3/04 • • by counting or integrating cycles of oscillations		

H03D

- 5/00** **Circuits for demodulating amplitude-modulated or angle-modulated oscillations at will** (H03D 9/00, H03D 11/00 take precedence)
- 7/00** **Transference of modulation from one carrier to another, e.g. frequency-changing** (H03D 9/00, H03D 11/00 take precedence; dielectric amplifiers, magnetic amplifiers, parametric amplifiers used as frequency-changers H03F)
- 7/02 • by means of diodes (H03D 7/14-H03D 7/22 take precedence)
- 7/04 • • having negative resistance characteristic, e.g. tunnel diode
- 7/06 • by means of discharge tubes having more than two electrodes (H03D 7/14-H03D 7/22 take precedence)
- 7/08 • • the signals to be mixed being applied between the same two electrodes
- 7/10 • • the signals to be mixed being applied between different pairs of electrodes
- 7/12 • by means of semiconductor devices having more than two electrodes (H03D 7/14-H03D 7/22 take precedence)
- 7/14 • Balanced arrangements
- 7/16 • Multiple frequency-changing
- 7/18 • Modifications of frequency-changers for eliminating image frequencies
- 7/20 • by means of transit-time tubes
- 7/22 • by deflecting an electron beam in a discharge tube (H03D 7/20 takes precedence)
- 9/00** **Demodulation or transference of modulation of modulated electromagnetic waves** (devices or arrangements for demodulating light, transferring modulation in light waves G02F 2/00)
- 9/02 • Demodulation using distributed inductance and capacitance, e.g. in feeder lines
- 9/04 • • for angle-modulated oscillations
- 9/06 • Transference of modulation using distributed inductance and capacitance
- 11/00** **Super-regenerative demodulator circuits**
- 11/02 • for amplitude-modulated oscillations
- 11/04 • • by means of semiconductor devices having more than two electrodes
- 11/06 • for angle-modulated oscillations
- 11/08 • • by means of semiconductor devices having more than two electrodes
- 13/00** **Circuits for comparing the phase or frequency of two mutually-independent oscillations**
- 99/00** **Subject matter not provided for in other groups of this subclass [2006.01]**