Symbol	Typ	Titel
G	**Sektion**	**PHYSICS**
G01	**Untersektion**	**INSTRUMENTS**
G01	**Klasse**	**MEASURING (counting G06M); TESTING**
G01S	**Unterklasse**	**RADIO DIRECTION-FINDING; RADIO NAVIGATION; DETERMINING DISTANCE OR VELOCITY BY USE OF RADIO WAVES; LOCATING OR PRESENCE-DETECTING BY USE OF THE REFLECTION OR RERADIATION OF RADIO WAVES; ANALOGOUS ARRANGEMENTS USING OTHER WAVES (detecting masses or objects by methods not involving reflection or reradiation of radio, acoustic or other waves G01V)**
G01S 1/00	**Hauptgruppe**	**Beacons or beacon systems transmitting signals having a characteristic or characteristics capable of being detected by non-directional receivers and defining directions, positions, or position lines fixed relatively to the beacon transmitters; Receivers co-operating therewith (position-fixing by co-ordinating a plurality of determinations of direction or position lines G01S 5/00) [2]**
G01S 1/02	1-Punkt Untergruppe	. using radio waves
G01S 1/04	2-Punkt Untergruppe	. . Details
G01S 1/06	3-Punkt Untergruppe	. . . Means for providing multiple indication, e.g. coarse and fine indications
G01S 1/08	2-Punkt Untergruppe	. . Systems for determining direction or position line
G01S 1/10	3-Punkt Untergruppe	. . . using amplitude comparison of signals transmitted sequentially from aerials or aerial systems having differently-oriented overlapping directivity-characteristics, e.g. equi-signal A-N type
G01S 1/12	4-Punkt Untergruppe	. . . . the signals being transmitted sequentially from an aerial or aerial system having the orientation of its directivity characteristic periodically varied, e.g. by means of sequentially effective reflectors
G01S 1/14	3-Punkt Untergruppe	. . . using amplitude comparison of signals transmitted simultaneously from aerials or aerial systems having differently-oriented overlapping directivity-characteristics
G01S 1/16	4-Punkt Untergruppe	. . . . Azimuthal guidance systems, e.g. system for defining aircraft approach path, localiser system
G01S 1/18	4-Punkt Untergruppe	. . . . Elevational guidance systems, e.g. system for defining aircraft glide path
G01S 1/20	3-Punkt Untergruppe	. . . using a comparison of transit time of synchronised signals transmitted from non-directional aerials or aerial systems spaced apart, i.e. path-difference systems
G01S 1/22	4-Punkt Untergruppe	. . . . the synchronised signals being frequency modulations on carrier waves and the transit times being compared by measuring difference of instantaneous frequencies of received carrier waves
G01S 1/24	4-Punkt Untergruppe	. . . . the synchronised signals being pulses or equivalent modulations on carrier waves and the transit times being compared by measuring the difference in arrival time of a significant part of the modulations
G01S 1/26	5-Punkt Untergruppe	. . . . . Systems in which pulses or time-base signals are generated locally at the receiver and brought into predetermined time-relationship with received signals, e.g. pulse duration coincides with time interval between arrival of significant part of modulation of signals received from first and second aerials or aerial systems
G01S 1/28	6-Punkt Untergruppe	. . . . . wherein the predetermined time-relationship is maintained automatically
G01S 1/30	4-Punkt Untergruppe	. . . . the synchronised signals being continuous waves or intermittent trains of continuous waves, the intermittency not being for the purpose of determining direction or position line and the transit times being compared by measuring the phase difference
G01S 1/32	5-Punkt Untergruppe	. . . . . Systems in which the signals received, with or without amplification, or signals derived therefrom, are compared in phase directly
G01S 1/34	5-Punkt Untergruppe	. . . . . Systems in which first and second synchronised signals are transmitted from both aerials or aerial systems and a beat frequency, obtained by heterodyning the first signals with each other is compared in phase with a beat frequency obtained by heterodyning the second signals with each other

Symbol	Typ	Titel
G01S 1/36	5-Punkt Untergruppe	. . . . . Systems in which a beat frequency, obtained by heterodyning the synchronised signals, is compared in phase with a reference signal having a phase substantially independent of direction
G01S 1/38	3-Punkt Untergruppe	. . . using comparison of (1) the phase of the envelope of the change of frequency, due to Doppler effect, of the signal transmitted by an aerial moving, or appearing to move, in a cyclic path with (2) the phase of a reference signal, the frequency of this reference signal being synchronised with that of the cyclic movement, or apparent cyclic movement, of the aerial
G01S 1/40	4-Punkt Untergruppe	. . . . the apparent movement of the aerial being produced by cyclic sequential energisation of fixed aerials
G01S 1/42	3-Punkt Untergruppe	. . . Conical-scan beam beacons transmitting signals which indicate at a mobile receiver any displacement of the receiver from the conical-scan axis, e.g. for "beam-riding" missile control [5]
G01S 1/44	3-Punkt Untergruppe	. . . Rotating or oscillating beam beacons defining directions in the plane of rotation or oscillation [5]
G01S 1/46	4-Punkt Untergruppe	. . . . Broad-beam systems producing at a receiver a substantially continuous sinusoidal envelope signal of the carrier wave of the beam, the phase angle of which is dependent upon the angle between the direction of the receiver from the beacon and a reference direction from the beacon, e.g. cardioid system [5]
G01S 1/48	5-Punkt Untergruppe	. . . . . wherein the phase angle of the direction-dependent envelope signal is a multiple of the direction angle, e.g. for "fine" bearing indication [5]
G01S 1/50	5-Punkt Untergruppe	. . . . . wherein the phase angle of the direction-dependent envelope signal is compared with a non-direction-dependent reference signal [5]
G01S 1/52	5-Punkt Untergruppe	. . . . . wherein the phase angles of a plurality of direction-dependent envelope signals produced by a plurality of beams rotating at different speeds or in different directions are compared [5]
G01S 1/54	4-Punkt Untergruppe	. . . . Narrow-beam systems producing at a receiver a pulse-type envelope signal of the carrier wave of the beam, the timing of which is dependent upon the angle between the direction of the receiver from the beacon and a reference direction from the beacon; Overlapping broad beam systems defining a narrow zone and producing at a receiver a pulse-type envelope signal of the carrier wave of the beam, the timing of which is dependent upon the angle between the direction of the receiver from the beacon and a reference direction from the beacon [5]
G01S 1/56	5-Punkt Untergruppe	. . . . . Timing the pulse-type envelope signals derived by reception of beam [5]
G01S 1/58	5-Punkt Untergruppe	. . . . . wherein a characteristic of the beam transmitted or of an auxiliary signal is varied in time synchronously with rotation or oscillation of the beam [5]
G01S 1/60	6-Punkt Untergruppe	. . . . . Varying frequency of beam signal or of auxiliary signal [5]
G01S 1/62	6-Punkt Untergruppe	. . . . . Varying phase-relationship between beam and auxiliary signal [5]
G01S 1/64	6-Punkt Untergruppe	. . . . . Varying pulse timing, e.g. varying interval between pulses radiated in pairs [5]
G01S 1/66	6-Punkt Untergruppe	. . . . . Superimposing direction-indicating intelligence signals, e.g. speech, Morse [5]
G01S 1/68	2-Punkt Untergruppe	. . Marker, boundary, call-sign, or like beacons transmitting signals not carrying directional information
G01S 1/70	1-Punkt Untergruppe	. using electromagnetic waves other than radio waves
G01S 1/72	1-Punkt Untergruppe	. using ultrasonic, sonic, or infrasonic waves (signalling devices G08B)
G01S 1/74	2-Punkt Untergruppe	. . Details [5]
G01S 1/76	2-Punkt Untergruppe	. . Systems for determining direction or position line (sound focusing or directing using electrical steering of transducer arrays, e.g. beam steering, in general, G10K 11/34) [5]
G01S 1/78	3-Punkt Untergruppe	. . . using amplitude comparison of signals transmitted from transducers or transducer systems having differently-oriented characteristics [5]
G01S 1/80	3-Punkt Untergruppe	. . . using a comparison of transit time of synchronised signals transmitted from non-directional transducers or transducer systems spaced apart, i.e. path-difference systems [5]

Symbol	Typ	Titel
G01S 1/82	3-Punkt Untergruppe	. . . Rotating or oscillating beam beacons defining directions in the plane of rotation or oscillation [5]
G01S 3/00	**Hauptgruppe**	**Direction-finders for determining the direction from which infrasonic, sonic, ultrasonic, or electromagnetic waves, or particle emission, not having a directional significance, are being received (position-fixing by co-ordinating a plurality of determinations of direction or position lines G01S 5/00; for geophysical measurement G01C; telescope mountings G02B)**
G01S 3/02	1-Punkt Untergruppe	. using radio waves
G01S 3/04	2-Punkt Untergruppe	. . Details
G01S 3/06	3-Punkt Untergruppe	. . . Means for increasing effective directivity, e.g. by combining signals having differently- oriented directivity characteristics, by sharpening the envelope waveform of the signal derived from a rotating or oscillating beam aerial (comparing amplitude of signals having differently-oriented directivity characteristics to determine direction G01S 3/16 , G01S 3/28; modifications of aerials or aerial systems H01Q)
G01S 3/08	3-Punkt Untergruppe	. . . Means for reducing polarisation errors, e.g. by use of Adcock or spaced loop aerial systems
G01S 3/10	3-Punkt Untergruppe	. . . Means for reducing or compensating for quadrantal, site, or like errors
G01S 3/12	3-Punkt Untergruppe	. . . Means for determining sense of direction, e.g. by combining signals from directional aerial or goniometer search coil with those from non-directional aerial (determining direction by amplitude comparison of signals derived by combining directional and non-directional signals G01S 3/24 , G01S 3/34)
G01S 3/14	2-Punkt Untergruppe	. . Systems for determining direction or deviation from predetermined direction
G01S 3/16	3-Punkt Untergruppe	. . . using amplitude comparison of signals derived sequentially from receiving aerials or aerial systems having differently-oriented directivity characteristics or from an aerial system having periodically-varied orientation of directivity characteristic
G01S 3/18	4-Punkt Untergruppe	. . . . derived directly from separate directional aerials
G01S 3/20	4-Punkt Untergruppe	. . . . derived by sampling signal received by an aerial system having periodically-varied orientation of directivity characteristic
G01S 3/22	4-Punkt Untergruppe	. . . . derived from different combinations of signals from separate aerials, e.g. comparing sum with difference
G01S 3/24	5-Punkt Untergruppe	. . . . . the separate aerials comprising one directional aerial and one non-directional aerial, e.g. combination of loop and open aerials producing a reversed cardioid directivity characteristic
G01S 3/26	5-Punkt Untergruppe	. . . . . the separate aerials having differently- oriented directivity characteristics
G01S 3/28	3-Punkt Untergruppe	. . . using amplitude comparison of signals derived simultaneously from receiving aerials or aerial systems having differently-oriented directivity characteristics
G01S 3/30	4-Punkt Untergruppe	. . . . derived directly from separate directional systems
G01S 3/32	4-Punkt Untergruppe	. . . . derived from different combinations of signals from separate aerials, e.g. comparing sum with difference
G01S 3/34	5-Punkt Untergruppe	. . . . . the separate aerials comprising one directional aerial and one non-directional aerial, e.g. combination of loop and open aerials producing a reversed cardioid directivity characteristic
G01S 3/36	5-Punkt Untergruppe	. . . . . the separate aerials having differently- oriented directivity characteristics
G01S 3/38	3-Punkt Untergruppe	. . . using adjustment of real or effective orientation of directivity characteristic of an aerial or an aerial system to give a desired condition of signal derived from that aerial or aerial system, e.g. to give a maximum or minimum signal (G01S 3/16 , G01S 3/28 take precedence)
G01S 3/40	4-Punkt Untergruppe	. . . . adjusting orientation of a single directivity characteristic to produce maximum or minimum signal, e.g. rotatable loop aerial, equivalent goniometer system
G01S 3/42	4-Punkt Untergruppe	. . . . the desired condition being maintained automatically

Symbol	Typ	Titel
G01S 3/44	4-Punkt Untergruppe	. . . . the adjustment being varied periodically or continuously until it is halted automatically when the desired condition is attained
G01S 3/46	3-Punkt Untergruppe	. . . using aerials spaced apart and measuring phase or time difference between signals therefrom, i.e. path-difference systems
G01S 3/48	4-Punkt Untergruppe	. . . . the waves arriving at the aerials being continuous or intermittent and the phase difference of signals derived therefrom being measured
G01S 3/50	4-Punkt Untergruppe	. . . . the waves arriving at the aerials being pulse modulated and the time difference of their arrival being measured
G01S 3/52	3-Punkt Untergruppe	. . . using a receiving aerial moving, or appearing to move, in a cyclic path to produce a Doppler variation of frequency of the received signal
G01S 3/54	4-Punkt Untergruppe	. . . . the apparent movement of the aerial being produced by coupling the receiver cyclically and sequentially to each of several fixed spaced aerials
G01S 3/56	3-Punkt Untergruppe	. . . Conical-scan beam systems using signals indicative of the deviation of the direction of reception from the scan axis
G01S 3/58	3-Punkt Untergruppe	. . . Rotating or oscillating beam systems using continuous analysis of received signal for determining direction in the plane of rotation or oscillation or for determining deviation from a predetermined direction in such a plane (G01S 3/14 takes precedence)
G01S 3/60	4-Punkt Untergruppe	. . . . Broad-beam systems producing in the receiver a substantially-sinusoidal envelope signal of the carrier wave of the beam, the phase angle of which is dependent upon the angle between the direction of the transmitter from the receiver and a reference direction from the receiver, e.g. cardioid system
G01S 3/62	5-Punkt Untergruppe	. . . . . wherein the phase angle of the signal is indicated by a cathode-ray tube
G01S 3/64	5-Punkt Untergruppe	. . . . . wherein the phase angle of the signal is determined by phase comparison with a reference alternating signal varying in synchronism with the directivity variation
G01S 3/66	4-Punkt Untergruppe	. . . . Narrow-beam systems producing in the receiver a pulse-type envelope signal of the carrier wave of the beam, the timing of which is dependent upon the angle between the direction of the transmitter from the receiver and a reference direction from the receiver; Overlapping broad-beam systems defining in the receiver a narrow zone and producing a pulse-type envelope signal of the carrier wave of the beam, the timing of which is dependent upon the angle between the direction of the transmitter from the receiver and a reference direction from the receiver
G01S 3/68	5-Punkt Untergruppe	. . . . . wherein the timing of the pulse-type envelope signal is indicated by cathode-ray tube (radar cathode-ray tube indicators providing co-ordinated display of distance and direction G01S 7/10)
G01S 3/70	5-Punkt Untergruppe	. . . . . wherein the timing of the pulse-type envelope signal is determined by bringing a locally-generated pulse-type signal into coincidence or other predetermined time-relationship with the envelope signal
G01S 3/72	2-Punkt Untergruppe	. . Diversity systems specially adapted for direction-finding
G01S 3/74	2-Punkt Untergruppe	. . Multi-channel systems specially adapted for direction-finding, i.e. having a single aerial system capable of giving simultaneous indications of the directions of different signals (systems in which the directions of different signals are determined sequentially and displayed simultaneously G01S 3/04 , G01S 3/14)
G01S 3/78	1-Punkt Untergruppe	. using electromagnetic waves other than radio waves
G01S 3/781	2-Punkt Untergruppe	. . Details [5]
G01S 3/782	2-Punkt Untergruppe	. . Systems for determining direction or deviation from predetermined direction [5]
G01S 3/783	3-Punkt Untergruppe	. . . using amplitude comparison of signals derived from static detectors or detector systems [5]
G01S 3/784	4-Punkt Untergruppe	. . . . using a mosaic of detectors [5]

Symbol	Typ	Titel
G01S 3/785	3-Punkt Untergruppe	. . . using adjustment of orientation of directivity characteristics of a detector or detector system to give a desired condition of signal derived from that detector or detector system [5]
G01S 3/786	4-Punkt Untergruppe	. . . . the desired condition being maintained automatically [5]
G01S 3/787	3-Punkt Untergruppe	. . . using rotating reticles producing a direction-dependent modulation characteristic [5]
G01S 3/788	4-Punkt Untergruppe	. . . . producing a frequency modulation characteristic [5]
G01S 3/789	3-Punkt Untergruppe	. . . using rotating or oscillating beam systems, e.g. using mirrors, prisms [5]
G01S 3/80	1-Punkt Untergruppe	. using ultrasonic, sonic, or infrasonic waves
G01S 3/801	2-Punkt Untergruppe	. . Details [5]
G01S 3/802	2-Punkt Untergruppe	. . Systems for determining direction or deviation from predetermined direction (sound-focusing or directing using electrical steering of transducer arrays, e.g. beam steering, in general, G10K 11/34) [5]
G01S 3/803	3-Punkt Untergruppe	. . . using amplitude comparison of signals derived from receiving transducers or transducer systems having differently-oriented directivity characteristics [5]
G01S 3/805	3-Punkt Untergruppe	. . . using adjustment of real or effective orientation of directivity characteristics of a transducer or transducer system to give a desired condition of signal derived from that transducer or transducer system, e.g. to give a maximum or minimum signal [5]
G01S 3/807	4-Punkt Untergruppe	. . . . the desired condition being maintained automatically [5]
G01S 3/808	3-Punkt Untergruppe	. . . using transducers spaced apart and measuring phase or time difference between signals therefrom, i.e. path-difference systems [5]
G01S 3/809	3-Punkt Untergruppe	. . . Rotating or oscillating beam systems using continuous analysis of received signal for determining direction in the plane of rotation or oscillation or for determining deviation from a predetermined direction in such a plane [5]
G01S 3/82	2-Punkt Untergruppe	. . with means for adjusting phase or compensating for time-lag errors
G01S 3/84	2-Punkt Untergruppe	. . with indication presented on cathode-ray tubes
G01S 3/86	2-Punkt Untergruppe	. . with means for eliminating undesired waves, e.g. disturbing noises
G01S 5/00	**Hauptgruppe**	**Position-fixing by co-ordinating two or more direction or position-line determinations; Position-fixing by co-ordinating two or more distance determinations [2]**
G01S 5/02	1-Punkt Untergruppe	. using radio waves
G01S 5/04	2-Punkt Untergruppe	. . Position of source determined by a plurality of spaced direction-finders
G01S 5/06	2-Punkt Untergruppe	. . Position of source determined by co-ordinating a plurality of position lines defined by path-difference measurements (G01S 5/12 takes precedence) [3]
G01S 5/08	2-Punkt Untergruppe	. . Position of single direction-finder fixed by determining direction of a plurality of spaced sources of known location
G01S 5/10	2-Punkt Untergruppe	. . Position of receiver fixed by co-ordinating a plurality of position lines defined by path-difference measurements (G01S 5/12 takes precedence) [3]
G01S 5/12	2-Punkt Untergruppe	. . by co-ordinating position lines of different shape, e.g. hyperbolic, circular, elliptical, radial (radar indicators providing co-ordinated display of direction and distance G01S 7/10)
G01S 5/14	2-Punkt Untergruppe	. . Determining absolute distances from a plurality of spaced points of known location
G01S 5/16	1-Punkt Untergruppe	. using electromagnetic waves other than radio waves
G01S 5/18	1-Punkt Untergruppe	. using ultrasonic, sonic, or infrasonic waves

Symbol	Typ	Titel
G01S 5/20	2-Punkt Untergruppe	. . Position of source determined by a plurality of spaced direction-finders [5]
G01S 5/22	2-Punkt Untergruppe	. . Position of source determined by co-ordinating a plurality of position lines defined by path-difference measurements (G01S 5/28 takes precedence) [5]
G01S 5/24	2-Punkt Untergruppe	. . Position of single direction-finder fixed by determining direction of a plurality of spaced sources of known location [5]
G01S 5/26	2-Punkt Untergruppe	. . Position of receiver fixed by co-ordinating a plurality of position lines defined by path-difference measurements (G01S 5/28 takes precedence) [5]
G01S 5/28	2-Punkt Untergruppe	. . by co-ordinating position lines of different shape, e.g. hyperbolic, circular, elliptical, radial (sonar indicators providing co-ordinated display of direction and distance G01S 7/62) [5]
G01S 5/30	2-Punkt Untergruppe	. . Determining absolute distances from a plurality of spaced points of known location [5]
G01S 7/00	**Hauptgruppe**	**Details of systems according to groups G01S 13/00 , G01S 15/00 , G01S 17/00**
G01S 7/02	1-Punkt Untergruppe	. of systems according to group G01S 13/00
G01S 7/03	2-Punkt Untergruppe	. . Details of HF subsystems specially adapted therefor, e.g. common to transmitter and receiver (TR boxes H01J 17/64; waveguides or resonators or other devices of the waveguide type H01P; aerials H01Q; basic electronic circuitry, e.g. generation of oscillations, modulation, demodulation, amplification, pulse technique H03; impedance networks, resonators H03H) [5]
G01S 7/04	2-Punkt Untergruppe	. . Display arrangements
G01S 7/06	3-Punkt Untergruppe	. . . Cathode-ray tube displays
G01S 7/08	4-Punkt Untergruppe	. . . . with vernier indication of distance, e.g. using two cathode-ray tubes
G01S 7/10	4-Punkt Untergruppe	. . . . Providing two-dimensional co-ordinated display of distance and direction
G01S 7/12	5-Punkt Untergruppe	. . . . . Plan-position indicators, i.e. P. P. I.
G01S 7/14	6-Punkt Untergruppe	. . . . . Sector, off-centre, or expanded- angle display
G01S 7/16	5-Punkt Untergruppe	. . . . . Signals displayed as intensity modulation with rectangular co-ordinates representing distance and bearing, e.g. type B
G01S 7/18	5-Punkt Untergruppe	. . . . . Distance-height displays; Distance-elevation displays, e.g. type RHI, type E
G01S 7/20	4-Punkt Untergruppe	. . . . Stereoscopic displays; Three-dimensional displays; Pseudo-three-dimensional displays
G01S 7/22	4-Punkt Untergruppe	. . . . Producing cursor lines and indicia by electronic means
G01S 7/24	4-Punkt Untergruppe	. . . . the display being orientated or displaced in accordance with movement of object carrying the transmitting and receiving apparatus, e.g. true-motion radar
G01S 7/26	3-Punkt Untergruppe	. . . Displays using electroluminescent panels
G01S 7/28	2-Punkt Untergruppe	. . Details of pulse systems
G01S 7/282	3-Punkt Untergruppe	. . . Transmitters [5]
G01S 7/285	3-Punkt Untergruppe	. . . Receivers [5]
G01S 7/288	4-Punkt Untergruppe	. . . . Coherent receivers [5]
G01S 7/292	4-Punkt Untergruppe	. . . . Extracting wanted echo-signals (Doppler systems G01S 13/50) [5]
G01S 7/295	4-Punkt Untergruppe	. . . . Means for transforming co-ordinates or for evaluating data, e.g. using computers [5]
G01S 7/298	5-Punkt Untergruppe	. . . . . Scan converters [5]

Symbol	Typ	Titel
G01S 7/32	4-Punkt Untergruppe	. . . . Shaping echo pulse signals; Deriving non-pulse signals from echo pulse signals [5]
G01S 7/34	4-Punkt Untergruppe	. . . . Gain of receiver varied automatically during pulse-recurrence period, e.g. anti-clutter gain control [5]
G01S 7/35	2-Punkt Untergruppe	. . Details of non-pulse systems [5]
G01S 7/36	2-Punkt Untergruppe	. . Means for anti-jamming
G01S 7/38	2-Punkt Untergruppe	. . Jamming means, e.g. producing false echoes [2]
G01S 7/40	2-Punkt Untergruppe	. . Means for monitoring or calibrating
G01S 7/41	2-Punkt Untergruppe	. . using analysis of echo signal for target characterisation; Target signature; Target cross-section [6]
G01S 7/42	2-Punkt Untergruppe	. . Diversity systems specially adapted for radar
G01S 7/48	1-Punkt Untergruppe	. of systems according to group G01S 17/00
G01S 7/481	2-Punkt Untergruppe	. . Constructional features, e.g. arrangements of optical elements [6]
G01S 7/483	2-Punkt Untergruppe	. . Details of pulse systems [6]
G01S 7/484	3-Punkt Untergruppe	. . . Transmitters [6]
G01S 7/486	3-Punkt Untergruppe	. . . Receivers [6]
G01S 7/487	4-Punkt Untergruppe	. . . . Extracting wanted echo signals [6]
G01S 7/489	4-Punkt Untergruppe	. . . . Gain of receiver varied automatically during pulse-recurrence period [6]
G01S 7/491	2-Punkt Untergruppe	. . Details of non-pulse systems [6]
G01S 7/493	3-Punkt Untergruppe	. . . Extracting wanted echo signals [6]
G01S 7/495	2-Punkt Untergruppe	. . Counter-measures or counter-counter-measures [6]
G01S 7/497	2-Punkt Untergruppe	. . Means for monitoring or calibrating [6]
G01S 7/499	2-Punkt Untergruppe	. . using polarisation effects (measuring polarisation of light G01J) [6]
G01S 7/51	2-Punkt Untergruppe	. . Display arrangements [6]
G01S 7/52	1-Punkt Untergruppe	. of systems according to group G01S 15/00
G01S 7/521	2-Punkt Untergruppe	. . Constructional features (constructional features of transducers B06B; mounting transducers G10K 11/00) [6]
G01S 7/523	2-Punkt Untergruppe	. . Details of pulse systems [6]
G01S 7/524	3-Punkt Untergruppe	. . . Transmitters [6]
G01S 7/526	3-Punkt Untergruppe	. . . Receivers [6]
G01S 7/527	4-Punkt Untergruppe	. . . . Extracting wanted echo signals [6]
G01S 7/529	4-Punkt Untergruppe	. . . . Gain of receiver varied automatically during pulse-recurrence period [6]
G01S 7/53	4-Punkt Untergruppe	. . . . Means for transforming co-ordinates or for evaluating data, e.g. using computers [6]
G01S 7/531	5-Punkt Untergruppe	. . . . . Scan converters [6]
G01S 7/533	5-Punkt Untergruppe	. . . . . Data rate converters [6]

Symbol	Typ	Titel
G01S 7/534	2-Punkt Untergruppe	. . Details of non-pulse systems [6]
G01S 7/536	3-Punkt Untergruppe	. . . Extracting wanted echo signals [6]
G01S 7/537	2-Punkt Untergruppe	. . Counter measures or counter-counter-measures, e.g. jamming, anti-jamming [6]
G01S 7/539	2-Punkt Untergruppe	. . using analysis of echo signal for target characterisation; Target signature; Target cross-section [6]
G01S 7/54	2-Punkt Untergruppe	. . with receivers spaced apart
G01S 7/56	2-Punkt Untergruppe	. . Display arrangements
G01S 7/58	3-Punkt Untergruppe	. . . for providing variable ranges
G01S 7/60	3-Punkt Untergruppe	. . . for providing a permanent recording
G01S 7/62	3-Punkt Untergruppe	. . . Cathode-ray tube displays
G01S 7/64	2-Punkt Untergruppe	. . Luminous indications (G01S 7/62 takes precedence) [5]
G01S 11/00	**Hauptgruppe**	**Systems for determining distance or velocity not using reflection or reradiation (direction-finders G01S 3/00; position-fixing by co-ordinating two or more distance determinations G01S 5/00) [2]**
G01S 11/02	1-Punkt Untergruppe	. using radio waves [5]
G01S 11/04	2-Punkt Untergruppe	. . using angle measurements [5]
G01S 11/06	2-Punkt Untergruppe	. . using intensity measurements [5]
G01S 11/08	2-Punkt Untergruppe	. . using synchronised clocks (synchronisation of electronic clocks G04G 7/02) [5]
G01S 11/10	2-Punkt Untergruppe	. . using Doppler effect [5]
G01S 11/12	1-Punkt Untergruppe	. using electromagnetic waves other than radio waves [5]
G01S 11/14	1-Punkt Untergruppe	. using ultrasonic, sonic or infrasonic waves [5]
G01S 11/16	1-Punkt Untergruppe	. using difference in transit time between electromagnetic and sonic waves [5]
G01S 13/00	**Hauptgruppe**	**Systems using the reflection or reradiation of radio waves, e.g. radar systems; Analogous systems using reflection or reradiation of waves whose nature or wavelength is irrelevant or unspecified (using acoustic waves G01S 15/00; using electromagnetic waves other than radio waves G01S 17/00) [3]**
G01S 13/02	1-Punkt Untergruppe	. Systems using reflection of radio waves, e.g. primary radar systems; Analogous systems [3]
G01S 13/04	2-Punkt Untergruppe	. . Systems determining presence of a target (based on relative movement of target G01S 13/56) [3]
G01S 13/06	2-Punkt Untergruppe	. . Systems determining position data of a target [3]
G01S 13/08	3-Punkt Untergruppe	. . . Systems for measuring distance only (indirect measurement G01S 13/46) [3]
G01S 13/10	4-Punkt Untergruppe	. . . . using transmission of interrupted pulse modulated waves (determination of distance by phase measurement G01S 13/32) [3]
G01S 13/12	5-Punkt Untergruppe	. . . . . wherein the pulse-recurrence frequency is varied to provide a desired time relationship between the transmission of a pulse and the receipt of the echo of a preceding pulse [3]
G01S 13/14	5-Punkt Untergruppe	. . . . . wherein a voltage or current pulse is initiated and terminated in accordance respectively with the pulse transmission and echo reception [3]
G01S 13/16	6-Punkt Untergruppe	. . . . . using counters [3]
G01S 13/18	5-Punkt Untergruppe	. . . . . wherein range gates are used [3]

Symbol	Typ	Titel
G01S 13/20	5-Punkt Untergruppe	. . . . . whereby multiple time-around echos are used or eliminated [3]
G01S 13/22	5-Punkt Untergruppe	. . . . . using irregular pulse repetition frequency [3]
G01S 13/24	5-Punkt Untergruppe	. . . . . using frequency agility of carrier wave [3]
G01S 13/26	5-Punkt Untergruppe	. . . . . wherein the transmitted pulses use a frequency- or phase-modulated carrier wave [3]
G01S 13/28	6-Punkt Untergruppe	. . . . . with time compression of received pulses [3]
G01S 13/30	5-Punkt Untergruppe	. . . . . using more than one pulse per radar period [3]
G01S 13/32	4-Punkt Untergruppe	. . . . using transmission of continuous unmodulated waves, amplitude-, frequency- or phase-modulated waves [3]
G01S 13/34	5-Punkt Untergruppe	. . . . . using transmission of frequency-modulated waves and the received signal, or a signal derived therefrom, being heterodyned with a locally-generated signal related to the contemporaneous transmitted signal to give a beat-frequency signal [3]
G01S 13/36	5-Punkt Untergruppe	. . . . . with phase comparison between the received signal and the contemporaneously transmitted signal [3]
G01S 13/38	6-Punkt Untergruppe	. . . . . wherein more than one modulation frequency is used [3]
G01S 13/40	6-Punkt Untergruppe	. . . . . wherein the frequency of transmitted signal is adjusted to give a predetermined phase relationship [3]
G01S 13/42	3-Punkt Untergruppe	. . . Simultaneous measurement of distance and other coordinates (indirect measurement G01S 13/46) [3]
G01S 13/44	4-Punkt Untergruppe	. . . . Monopulse radar, i.e. simultaneous lobing [3]
G01S 13/46	3-Punkt Untergruppe	. . . Indirect determination of position data [3]
G01S 13/48	4-Punkt Untergruppe	. . . . using multiple beams at emission or reception [3]
G01S 13/50	2-Punkt Untergruppe	. . Systems of measurement based on relative movement of target [3]
G01S 13/52	3-Punkt Untergruppe	. . . Discriminating between fixed and moving objects or between objects moving at different speeds [3]
G01S 13/522	4-Punkt Untergruppe	. . . . using transmissions of interrupted pulse modulated waves [5]
G01S 13/524	5-Punkt Untergruppe	. . . . . based upon the phase or frequency shift resulting from movement of objects, with reference to the transmitted signals, e.g. coherent MTi (coherent receivers G01S 7/288) [5]
G01S 13/526	6-Punkt Untergruppe	. . . . . performing filtering on the whole spectrum without loss of range information, e.g. using delay line cancellers or comb filters [5]
G01S 13/528	7-Punkt Untergruppe	. . . . . with elimination of blind speeds [5]
G01S 13/53	6-Punkt Untergruppe	. . . . . performing filtering on a single spectral line and associated with one or more range gates with a phase detector or a frequency mixer to extract the Doppler information, e.g. pulse Doppler radar [5]
G01S 13/532	7-Punkt Untergruppe	. . . . . using a bank of range gates or a memory matrix [5]
G01S 13/534	6-Punkt Untergruppe	. . . . . based upon amplitude or phase shift resulting from movement of objects, with reference to the surrounding clutter echo signal, e.g. non-coherent MTi, clutter referenced MTi, externally coherent MTi [5]
G01S 13/536	4-Punkt Untergruppe	. . . . using transmission of continuous unmodulated waves, amplitude-, frequency-, or phase-modulated waves [5]
G01S 13/538	4-Punkt Untergruppe	. . . . eliminating objects that have not moved between successive antenna scans, e.g. area MTi [5]
G01S 13/56	4-Punkt Untergruppe	. . . . for presence detection [3]
G01S 13/58	3-Punkt Untergruppe	. . . Velocity or trajectory determination systems; Sense-of-movement determination systems [3]

Symbol	Typ	Titel
G01S 13/60	4-Punkt Untergruppe	. . . . wherein the transmitter and receiver are mounted on the moving object, e.g. for determining ground speed, drift angle, ground track (G01S 13/64 takes precedence) [3]
G01S 13/62	4-Punkt Untergruppe	. . . . Sense-of-movement determination [3]
G01S 13/64	4-Punkt Untergruppe	. . . . Velocity measuring systems using range gates [3]
G01S 13/66	1-Punkt Untergruppe	. Radar-tracking systems; Analogous systems [3]
G01S 13/68	2-Punkt Untergruppe	. . for angle tracking only [3]
G01S 13/70	2-Punkt Untergruppe	. . for range tracking only [3]
G01S 13/72	2-Punkt Untergruppe	. . for two-dimensional tracking, e.g. combination of angle and range tracking, track-while-scan radar [3]
G01S 13/74	1-Punkt Untergruppe	. Systems using reradiation of radio waves, e.g. secondary radar systems; Analogous systems [3, 6]
G01S 13/75	2-Punkt Untergruppe	. . using transponders powered from received waves, e.g. using passive transponders [6]
G01S 13/76	2-Punkt Untergruppe	. . wherein pulse-type signals are transmitted [3]
G01S 13/78	3-Punkt Untergruppe	. . . discriminating between different kinds of targets, e.g. IFF-radar, i.e. identification of friend or foe (G01S 13/75 , G01S 13/79 takes precedence) [3]
G01S 13/79	2-Punkt Untergruppe	. . Systems using random coded signals or random pulse repetition frequencies [6]
G01S 13/82	2-Punkt Untergruppe	. . wherein continuous-type signals are transmitted [3]
G01S 13/84	3-Punkt Untergruppe	. . . for distance determination by phase measurement [3]
G01S 13/86	1-Punkt Untergruppe	. Combinations of radar systems with non-radar systems, e.g. sonar, direction finder [3]
G01S 13/87	1-Punkt Untergruppe	. Combinations of radar systems, e.g. primary radar and secondary radar [3]
G01S 13/88	1-Punkt Untergruppe	. Radar or analogous systems, specially adapted for specific applications (G01S 13/89 to G01S 13/95 take precedence; electromagnetic prospecting or detecting of objects, e.g. near-field detection, G01V 3/00) [3, 6]
G01S 13/89	1-Punkt Untergruppe	. Radar or analogous systems, designed for mapping or imaging [3]
G01S 13/90	2-Punkt Untergruppe	. . using synthetic aperture techniques [3, 6]
G01S 13/91	1-Punkt Untergruppe	. Radar or analogous systems, designed for traffic control (G01S 13/93 takes precedence) [3]
G01S 13/92	2-Punkt Untergruppe	. . for velocity measurement [3]
G01S 13/93	1-Punkt Untergruppe	. Radar or analogous systems, designed for anti-collision purposes [3]
G01S 13/94	1-Punkt Untergruppe	. Radar or analogous systems, designed for terrain-avoidance [3]
G01S 13/95	1-Punkt Untergruppe	. Radar or analogous systems, designed for meteorological use [3]
G01S 15/00	**Hauptgruppe**	**Systems using the reflection or reradiation of acoustic waves, e.g. sonar systems [3]**
G01S 15/02	1-Punkt Untergruppe	. using reflection of acoustic waves (G01S 15/66 takes precedence) [3]
G01S 15/04	2-Punkt Untergruppe	. . Systems determining presence of a target [3]
G01S 15/06	2-Punkt Untergruppe	. . Systems determining position data of a target [3]
G01S 15/08	3-Punkt Untergruppe	. . . Systems for measuring distance only (indirect measurement G01S 15/46) [3]
G01S 15/10	4-Punkt Untergruppe	. . . . using transmission of interrupted pulse-modulated waves (determination of distance by phase measurement G01S 15/32) [3]

Symbol	Typ	Titel
G01S 15/12	5-Punkt Untergruppe	. . . . . wherein the pulse-recurrence frequency is varied to provide a desired time relationship between the transmission of a pulse and the receipt of the echo of a preceding pulse [3]
G01S 15/14	5-Punkt Untergruppe	. . . . . wherein a voltage or current pulse is initiated and terminated in accordance respectively with the pulse transmission and echo reception [3]
G01S 15/18	5-Punkt Untergruppe	. . . . . wherein range gates are used [3]
G01S 15/32	4-Punkt Untergruppe	. . . . using transmission of continuous unmodulated waves, amplitude-, frequency- or phase-modulated waves [3]
G01S 15/34	5-Punkt Untergruppe	. . . . . using transmission of frequency-modulated waves and the received signal, or a signal derived therefrom, being heterodyned with a locally-generated signal related to the contemporaneous transmitted signal to give a beat-frequency signal [3]
G01S 15/36	5-Punkt Untergruppe	. . . . . with phase comparison between the received signal and the contemporaneously transmitted signal [3]
G01S 15/42	3-Punkt Untergruppe	. . . Simultaneous measurement of distance and other coordinates (indirect measurement G01S 15/46) [3]
G01S 15/46	3-Punkt Untergruppe	. . . Indirect determination of position data [3]
G01S 15/50	2-Punkt Untergruppe	. . Systems of measurement based on relative movement of target [3]
G01S 15/52	3-Punkt Untergruppe	. . . Discriminating between fixed and moving objects or between objects moving at different speeds [3]
G01S 15/58	3-Punkt Untergruppe	. . . Velocity or trajectory determination systems; Sense-of-movement determination systems [3]
G01S 15/60	4-Punkt Untergruppe	. . . . wherein the transmitter and receiver are mounted on the moving object, e.g. for determining ground speed, drift angle, ground track [3]
G01S 15/62	4-Punkt Untergruppe	. . . . Sense-of-movement determination [3]
G01S 15/66	1-Punkt Untergruppe	. Sonar tracking systems [3]
G01S 15/74	1-Punkt Untergruppe	. Systems using reradiation of acoustic waves, e.g. IFF, i.e. identification of friend or foe [3]
G01S 15/87	1-Punkt Untergruppe	. Combinations of sonar systems [3]
G01S 15/88	1-Punkt Untergruppe	. Sonar systems, specially adapted for specific applications (G01S 15/89 to G01S 15/96 take precedence; seismic or acoustic prospecting or detecting G01V 1/00) [3, 6]
G01S 15/89	1-Punkt Untergruppe	. Sonar systems designed for mapping or imaging [3]
G01S 15/93	1-Punkt Untergruppe	. Sonar systems designed for anti-collision purposes [3]
G01S 15/96	1-Punkt Untergruppe	. Sonar systems designed for locating fish [3]
G01S 17/00	**Hauptgruppe**	**Systems using the reflection or reradiation of electromagnetic waves other than radio waves [3]**
G01S 17/02	1-Punkt Untergruppe	. Systems using the reflection of electromagnetic waves other than radio waves (G01S 17/66 takes precedence) [3]
G01S 17/06	2-Punkt Untergruppe	. . Systems determining position data of a target [3]
G01S 17/08	3-Punkt Untergruppe	. . . for measuring distance only (indirect measurement G01S 17/46; using a parallactic triangle G01C 3/10 , G01C 3/22 , G01C 3/24 , G01C 3/26) [3]
G01S 17/10	4-Punkt Untergruppe	. . . . using transmission of interrupted pulse-modulated waves (determination of distance by phase measurements G01S 17/32) [3]
G01S 17/32	4-Punkt Untergruppe	. . . . using transmission of continuous unmodulated waves, amplitude-, frequency-, or phase-modulated waves [3]
G01S 17/36	5-Punkt Untergruppe	. . . . . with phase comparison between the received signal and the contemporaneously transmitted signal [3]

Symbol	Typ	Titel
G01S 17/42	3-Punkt Untergruppe	. . . Simultaneous measurement of distance and other coordinates (indirect measurement G01S 17/46) [3]
G01S 17/46	3-Punkt Untergruppe	. . . Indirect determination of position data [3]
G01S 17/50	2-Punkt Untergruppe	. . Systems of measurement based on relative movement of target [3]
G01S 17/58	3-Punkt Untergruppe	. . . Velocity or trajectory determination systems; Sense-of-movement determination systems [3]
G01S 17/66	1-Punkt Untergruppe	. Tracking systems using electromagnetic waves other than radio waves [3]
G01S 17/74	1-Punkt Untergruppe	. Systems using reradiation of electromagnetic waves other than radio waves, e.g. IFF, i.e. identification of friend or foe [3]
G01S 17/87	1-Punkt Untergruppe	. Combinations of systems using electromagnetic waves other than radio waves [3]
G01S 17/88	1-Punkt Untergruppe	. Lidar systems, specially adapted for specific applications (G01S 17/89 to G01S 17/95 take precedence) [3]
G01S 17/89	1-Punkt Untergruppe	. Lidar systems designed for mapping or imaging [6]
G01S 17/93	1-Punkt Untergruppe	. Lidar systems designed for anti-collision purposes [6]
G01S 17/95	1-Punkt Untergruppe	. Lidar systems designed for meteorological use [6]