CPC NOTICE OF CHANGES 782

DATE: JANUARY 1, 2020

PROJECT RP0652

The following classification changes will be effected by this Notice of Changes:

Action	Subclass	Group(s)
SCHEME:		
Symbols Deleted:	G01S	13/9303, 13/9307, 2013/9332, 2013/9335, 2013/9339, 2013/9342, 2013/9346, 2013/935, 2013/9353, 2013/9357, 2013/936, 2013/9364, 2013/9367, 2013/9371, 2013/9375, 2013/9378, 2013/9382, 2013/9385, 2013/9389, 2013/9392, 2013/9396, 13/94
	G01S	15/025
	G01S	17/023, 17/026, 17/102, 17/105, 17/107, 17/325, 17/895, 17/936
Symbols New:	G01S	2013/9315, 2013/9316, 2013/9318, 2013/93185, 2013/9319, 2013/932, 2013/9322, 2013/9323, 2013/9324, 2013/9327, 2013/93271, 2013/93272, 2013/93273, 2013/93274, 2013/93275, 2013/93276, 2013/93277, 2013/9329, 13/933, 13/934, 13/935, 13/937
	G01S	15/86
	G01S	17/04, 17/14, 17/18, 17/26, 17/34, 17/86, 17/894, 17/90, 17/931
Titles Changed:	G01S	7/00, 7/03, 7/10, 7/20, 7/22, 7/292, 7/36, 7/38, 7/4861, 7/4863, 7/4865, 7/4911, 7/4912, 7/4913, 7/4914, 7/4915, 7/499, 7/62
	G01S	13/00, 13/931, 2013/9314, 2013/9317, 2013/9321, 2013/9325, 2013/9328
	G01S	15/74, 15/931
	G01S	17/00, 17/74, 17/875, 17/933
Warnings New:	G01S	17/89, 17/894
DEFINITIONS:		
Definitions Deleted:	G01S	13/9303
	G01S	17/026
Definitions New:	G01S	7/499
	G01S	13/933
	G01S	15/74
	G01S	17/04, 17/74
Definitions Modified:	G01S	SUBCLASS
	G01S	7/00, 7/03, 7/292, 7/36, 7/38, 7/491
	G01S	13/00
	G01S	15/00
	G01S	17/00

The following subclasses/groups are also impacted by this Notice of Changes: G05D, G08G, H01L, H03K

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PROJECT RP0652

This Notice of Changes includes the following*:*

1. CLASSIFICATION SCHEME CHANGES
   - ☒ A. New, Modified or Deleted Group(s)
   - ☒ B. New, Modified or Deleted Warning(s)
   - ☐ C. New, Modified or Deleted Note(s)
   - ☐ D. New, Modified or Deleted Guidance Heading(s)
2. DEFINITIONS
   - ☒ A. New or Modified Definitions (Full definition template)
   - ☒ B. Modified or Deleted Definitions (Definitions Quick Fix)
3. ☒ REVISION CONCORDANCE LIST (RCL)
4. ☒ CHANGES TO THE CPC-TO-IPC CONCORDANCE LIST (CICL)
5. ☒ CHANGES TO THE CROSS-REFERENCE LIST (CRL)

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PROJECT RP0652

1. CLASSIFICATION SCHEME CHANGES

    A. New, Modified or Deleted Group(s)

SUBCLASS G01S – 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

Type *	Symbol	Indent Level Number of dots (e.g. 0, 1, 2)	Title "CPC only" text should normally be enclosed in {curly brackets}**	Transferred to#
M	G01S 7/00	0	Details of systems according to groups G01S13/00, G01S15/00, G01S17/00	
M	G01S 7/03	2	Details of HF subsystems specially adapted therefor, e.g. common to transmitter and receiver	
M	G01S 7/10	4	Providing two-dimensional and co-ordinated display of distance and direction	
M	G01S 7/20	4	Stereoscopic displays; Three-dimensional displays; Pseudo-three-dimensional displays	
M	G01S 7/22	4	Producing cursor lines and indicia by electronic means	
M	G01S 7/292	4	Extracting wanted echo-signals	
M	G01S 7/36	2	Means for anti-jamming {, e.g. electronic counter-counter measures [ECCM] (G01S7/2813 takes precedence; identification of radar jamming signals G01S7/021; random interference pulse cancellers G01S7/2928)}	
M	G01S 7/38	2	Jamming means, e.g. producing false echoes {(identification of radar signals G01S7/021)}	
U	G01S 7/486	3	Receivers	
M	G01S 7/4861	4	Circuits for detection, sampling, integration or read-out	
M	G01S 7/4863	5	Detector arrays, e.g. charge-transfer gates	
M	G01S 7/4865	4	Time delay measurement, e.g. time-of-flight measurement, time of arrival measurement or determining the exact position of a peak (peak detection in noise, signal conditioning G01S 7/487)	
U	G01S 7/4866	5	{by fitting a model or function to the received signal}	
U	G01S 7/491	2	Details of non-pulse systems	
M	G01S 7/4911	3	Transmitters	
M	G01S 7/4912	3	Receivers	

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Type *	Symbol	Indent Level Number of dots (e.g. 0, 1, 2)	Title "CPC only" text should normally be enclosed in {curly brackets}**	Transferred to#
M	G01S 7/4913	4	Circuits for detection, sampling, integration or read-out	
M	G01S 7/4914	5	of detector arrays, e.g. charge-transfer gates	
M	G01S 7/4915	4	Time delay measurement, e.g. operational details for pixel components (signal extraction and conditioning G01S 7/493); Phase measurement	
M	G01S 7/499	2	using polarisation effects	
M	G01S 7/62	3	Cathode-ray tube displays {or other two-dimensional or three-dimensional displays}	
M	G01S 13/00	0	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	
U	G01S 13/93	2	for anti-collision purposes	
D	G01S 13/9303	3	{between aircraft or spacecraft in flight, e.g. secant (terrain-avoidance systems G01S 13/94)}	<administrative transfer to G01S 13/933>
D	G01S 13/9307	3	{between marine crafts; between marine crafts and fixed obstacles}	<administrative transfer to G01S 13/937>
M	G01S 13/931	3	of land vehicles	
M	G01S 2013/9314	4	{Parking operations}	
N	G01S 2013/9315	4	{Monitoring blind spots}	
N	G01S 2013/9316	4	{combined with communication equipment with other vehicles or with base stations}	
M	G01S 2013/9317	4	{Driving backwards}	
N	G01S 2013/9318	4	{Controlling the steering}	
N	G01S 2013/93185	4	{Controlling the brakes}	
N	G01S 2013/9319	4	{Controlling the accelerator}	
N	G01S 2013/932	4	{using own vehicle data, e.g. ground speed, steering wheel direction}	
M	G01S 2013/9321	4	{Velocity regulation, e.g. cruise control}	
N	G01S 2013/9322	4	{using additional data, e.g. driver condition, road state or weather data}	
N	G01S 2013/9323	4	{Alternative operation using light waves}	
N	G01S 2013/9324	4	{Alternative operation using ultrasonic waves}	
M	G01S 2013/9325	4	{for inter-vehicle distance regulation, e.g. navigating in platoons}	
N	G01S 2013/9327	4	{Sensor installation details}	
N	G01S 2013/93271	5	{in the front of the vehicles}	
N	G01S 2013/93272	5	{in the back of the vehicles}	

Type *	Symbol	Indent Level Number of dots (e.g. 0, 1, 2)	Title "CPC only" text should normally be enclosed in {curly brackets}**	Transferred to#
N	G01S 2013/93273	5	{on the top of the vehicles}	
N	G01S 2013/93274	5	{on the side of the vehicles}	
N	G01S 2013/93275	5	{in the bumper area}	
N	G01S 2013/93276	5	{in the windshield area}	
N	G01S 2013/93277	5	{in the lights}	
M	G01S 2013/9328	4	{Rail vehicles}	
N	G01S 2013/9329	4	{cooperating with reflectors or transponders}	
N	G01S 13/933	3	of aircraft or spacecraft	
D	G01S 2013/9332	4	{for monitoring blind spots}	<administrative transfer to G01S 2013/9315>
D	G01S 2013/9335	4	{on airport surface (taxiing)}	<administrative transfer to G01S 13/934>
D	G01S 2013/9339	4	{cooperating with reflectors or transponders}	<administrative transfer to G01S 2013/9329>
N	G01S 13/934	4	on airport surfaces, e.g. while taxiing	
D	G01S 2013/9342	4	{controlling the steering}	<administrative transfer to G01S 2013/9318>
D	G01S 2013/9346	4	{controlling the brakes}	<administrative transfer to G01S 2013/93185>
D	G01S 2013/935	4	{controlling the accelerator}	<administrative transfer to G01S 2013/9319>
N	G01S 13/935	4	for terrain-avoidance	
D	G01S 2013/9353	4	{using own vehicle data, e.g. ground speed, steering wheel direction}	<administrative transfer to G01S 2013/932>
D	G01S 2013/9357	4	{using additional data, e.g. driver condition, road state, weather data}	<administrative transfer to G01S 2013/9322>
D	G01S 2013/936	4	{combined with communication equipment with other vehicles and/or with base stations(s)}	<administrative transfer to G01S 2013/9316>
D	G01S 2013/9364	4	{Alternative operation using ultrasonic waves}	<administrative transfer to G01S 2013/9324>
D	G01S 2013/9367	4	{Alternative operation using light waves}	<administrative transfer to G01S 2013/9323>
N	G01S 13/937	3	of marine craft	
D	G01S 2013/9371	4	{Sensor installation details}	<administrative transfer to G01S 2013/9327>
D	G01S 2013/9375	5	{in the front of the vehicle}	<administrative transfer to G01S 2013/93271>
D	G01S 2013/9378	5	{in the back of the vehicle}	<administrative transfer to G01S 2013/93272>
D	G01S 2013/9382	5	{on the top of the vehicle}	<administrative transfer to G01S 2013/93273>
D	G01S 2013/9385	5	{on the side(s) of the vehicle}	<administrative transfer to G01S 2013/93274>
D	G01S 2013/9389	5	{in the bumper area (ultrasonic transducer in bumper area G01S 2015/938; bumper	<administrative transfer to G01S 2013/93275>

Type *	Symbol	Indent Level Number of dots (e.g. 0, 1, 2)	Title "CPC only" text should normally be enclosed in {curly brackets}**	Transferred to#
			with obstacle sensor of electric or electronic type B60R 19/483)}	
D	G01S 2013/9392	5	{in the windshield area}	<administrative transfer to G01S 2013/93276>
D	G01S 2013/9396	5	{in the lights}	<administrative transfer to G01S 2013/93277>
D	G01S 13/94	2	for terrain-avoidance	<administrative transfer to G01S 13/935>
U	G01S 15/00	0	Systems using the reflection or reradiation of acoustic waves, e.g. sonar systems	
D	G01S 15/025	2	{Combination of sonar systems with non-sonar or non-radar systems, e.g. with direction finder}	<administrative transfer to G01S 15/86>
M	G01S 15/74	1	Systems using reradiation of acoustic waves, e.g. IFF, i.e. identification of friend or foe	
N	G01S 15/86	1	Combinations of sonar systems with lidar systems; Combinations of sonar systems with systems not using wave reflection	
U	G01S 15/88	1	Sonar systems specially adapted for specific applications (seismic or acoustic prospecting or detecting G01V 1/00)	
U	G01S 15/93	2	for anti-collision purposes	
M	G01S 15/931	3	of land vehicles	
M	G01S 17/00	0	Systems using the reflection or reradiation of electromagnetic waves other than radio waves, e.g. lidar systems	
U	G01S 17/02	1	Systems using the reflection of electromagnetic waves other than radio waves (G01S 17/66 takes precedence)	
D	G01S 17/023	2	{Combination of lidar systems, with systems other than lidar, radar or sonar, e.g. with direction finder}	<administrative transfer to G01S 17/86>
D	G01S 17/026	2	{for detecting the presence of an object}	<administrative transfer to G01S 17/04>
N	G01S 17/04	2	Systems determining the presence of a target	
U	G01S 17/10	4	using transmission of interrupted pulse-modulated waves (determination of distance by phase measurements G01S 17/32)	
D	G01S 17/102	5	{wherein the transmitted pulses use a frequency- or phase modulated carrier wave, e.g. for pulse compression of received signals}	<administrative transfer to G01S 17/26>

Type *	Symbol	Indent Level Number of dots (e.g. 0, 1, 2)	Title "CPC only" text should normally be enclosed in {curly brackets}**	Transferred to#
D	G01S 17/105	5	{wherein a voltage or current pulse is initiated and terminated in accordance respectively with the pulse transmission and echo-reception, e.g. using counters}	<administrative transfer to G01S 17/14>
D	G01S 17/107	5	{wherein range gates are used}	<administrative transfer to G01S 17/18>
N	G01S 17/14	5	wherein a voltage or current pulse is initiated and terminated in accordance with the pulse transmission and echo reception respectively, e.g. using counters	
N	G01S 17/18	5	wherein range gates are used	
N	G01S 17/26	5	wherein the transmitted pulses use a frequency-modulated or phase-modulated carrier wave, e.g. for pulse compression of received signals	
U	G01S 17/32	4	using transmission of continuous unmodulated waves, amplitude-, frequency-, or phase-modulated waves	
D	G01S 17/325	5	{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}	<administrative transfer to G01S 17/34>
N	G01S 17/34	5	using transmission of continuous 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	
M	G01S 17/74	1	Systems using reradiation of electromagnetic waves other than radio waves, e.g. IFF, i.e. identification of friend or foe	
N	G01S 17/86	1	Combinations of lidar systems with systems other than lidar, radar or sonar, e.g. with direction finders	
U	G01S 17/87	1	Combinations of systems using electromagnetic waves other than radio waves	
M	G01S 17/875	2	for determining attitude	
C	G01S 17/89	2	for mapping or imaging	G01S 17/89, G01S 17/894
N	G01S 17/894	3	3D imaging with simultaneous measurement of time-of-flight at a 2D	

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Type *	Symbol	Indent Level Number of dots (e.g. 0, 1, 2)	Title "CPC only" text should normally be enclosed in {curly brackets}**	Transferred to#
			array of receiver pixels, e.g. time-of-flight cameras or flash lidar	
D	G01S 17/895	3	{using synthetic aperture techniques}	\<administrative transfer to G01S 17/90>
N	G01S 17/90	3	using synthetic aperture techniques	
U	G01S 17/93	2	for anti-collision purposes	
N	G01S 17/931	3	of land vehicles	
M	G01S 17/933	3	of aircraft or spacecraft	
D	G01S 17/936	3	{between land vehicles; between land vehicles and fixed obstacles}	\<administrative transfer to G01S 17/931>

*N = new entries where reclassification into entries is involved; C = entries with modified file scope where reclassification of documents from the entries is involved; Q = new entries which are firstly populated with documents via administrative transfers from deleted (D) entries. Afterwards, the transferred documents into the Q entry will either stay or be moved to more appropriate entries, as determined by intellectual reclassification; T= existing entries with enlarged file scope, which receive documents from C or D entries, e.g. when a limiting reference is removed from the entry title; M = entries with no change to the file scope (no reclassification); D = deleted entries; F = frozen entries will be deleted once reclassification of documents from the entries is completed; U = entries that are unchanged.

NOTES:
- **No {curly brackets} are used for titles in CPC only subclasses, e.g. C12Y, A23Y; 2000 series symbol titles of groups found at the end of schemes (orthogonal codes); or the Y section titles. The {curly brackets} are used for 2000 series symbol titles found interspersed throughout the main trunk schemes (breakdown codes).
- U groups: it is obligatory to display the required "anchor" symbol (U group), i.e. the entry immediately preceding a new group or an array of new groups to be created (in case new groups are not clearly subgroups of C-type groups). Always include the symbol, indent level and title of the U group in the table above.
- All entry types should be included in the scheme changes table above for better understanding of the overall scheme change picture. Symbol, indent level, and title are required for all types.
- "Transferred to" column must be completed for all C, D, F, and Q type entries. F groups will be deleted once reclassification is completed.
- When multiple symbols are included in the "Transferred to" column, avoid using ranges of symbols in order to be as precise as possible.
- For administrative transfer of documents, the following text should be used: "< administrative transfer to XX>", "<administrative transfer to XX and YY simultaneously>", or "<administrative transfer to XX, YY ...and ZZ simultaneously>" when administrative transfer of the same documents is to more than one place.
- Administrative transfer to main trunk groups is assumed to be the source allocation type, unless otherwise indicated.
- Administrative transfer to 2000/Y series groups is assumed to be "additional information".
- If needed, instructions for allocation type should be indicated within the angle brackets using the abbreviations "ADD" or "INV": <administrative transfer to XX ADD> , <administrative transfer to XX INV>, or < administrative transfer to XX ADD, YY INV, ... and ZZ ADD simultaneously>.
- In certain situations, the "D" entries of 2000-series or Y-series groups may not require a destination ("Transferred to") symbol, however it is required to specify "<no transfer>" in the "Transferred to" column for such cases.
- For finalisation projects, the deleted "F" symbols should have <no transfer> in the "Transferred to" column.
- For more details about the types of scheme change, see CPC Guide.

B. New, Modified or Deleted Warning(s)

SUBCLASS G01S – 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

Type	Location	Old warning	New warning
N	G01S 17/89		Group G01S 17/89 is impacted by reclassification into group G01S 17/894. Groups G01S 17/89 and G01S 17/894 should be considered in order to perform a complete search.
N	G01S 17/894		Group G01S 17/894 is incomplete pending reclassification of documents from group G01S 17/89. Groups G01S 17/89 and G01S 17/894 should be considered in order to perform a complete search.

*N = new warning, M = modified warning, D = deleted warning

NOTE: The "Location" column only requires the symbol PRIOR to the location of the warning. No further directions such as "before" or "after" are required.

2. A. DEFINITIONS (new)

<u>Insert</u> the following <u>new</u> definitions.

G01S 7/499

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Measuring polarisation of light	G01J

G01S 13/933

Synonyms and Keywords

In patent documents, the following abbreviations are often used:

TCAS	Traffic Collision Avoidance System

G01S15/74

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Teaching or practice apparatus for gun-arming or gun-laying using reflecting targets or active targets	F41G 3/26

G01S 17/04

Definition statement

This place covers:

Systems where only the detection of the existence or not of a signal reflected from a target to the receiver is important.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Prospecting by optical means; detecting the presence of objects or masses by optical means, e.g. by interruption of beams, i.e. light barriers	G01V 8/00

G01S 17/74

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Teaching or practice apparatus for gun-arming or gun-laying using reflecting targets or active targets	F41G 3/26

2. A. DEFINITIONS (modified)

G01S

Definition statement

Replace: The existing statement in the Definition statement section with the following new statements.

- Methods or apparatus for determining positions, directions and distances by use of radio waves.

- Methods or apparatus for determining velocities of solid objects/bodies by use of radio waves, unless the body is moving relative to some fluid and the influence of the streaming medium on the wave propagating therein is measured.

- Methods or apparatus for locating solid objects/bodies, or detecting their presence by use of reflection or re-radiation of radio waves.

- Methods or apparatus for navigation by use of radio waves (attention is drawn to the limited scope of the term navigation, given below in the section Glossary of Terms).

- Analogous methods or apparatus using other waves than radio waves, e.g. infrared, visible or ultraviolet light, or acoustic waves. Certain restrictions and priorities apply as regards other subclasses (see sections Relationships between larger subject matter areas and References relevant to classification in this subclass below).

- Radar, Lidar, Sonar systems in general and specially adapted for specific applications if not specifically designed for geophysical use.

Insert: The following new Relationships with other classifications places section.

Relationships with other classification places

The general subject matters direction-finding, navigation, determining distances or velocities, locating, or presence-detecting are covered by

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several subclasses besides G01S such as: G01B, G01C, G01P, G01V.

G01S necessarily requires the use of waves (attention is drawn to the section Glossary of terms).

Therefore, the use of static or time-varying fields that do not obey a wave equation is not sufficient for subject matter to be classified in G01S.

G01S specially emphasizes radio waves. Thus, this subclass is always the appropriate place when radio waves are used for determining directions, bearings, or distances. It is also always appropriate when radio waves are used for determining velocities of solid objects or bodies as well as for locating such bodies or detecting their presence. It is also always appropriate for navigation by using radio waves (attention is drawn to the limited scope of the term navigation, given below in the section Glossary of terms).

As regards the use of other waves than radio waves, the part "analogous arrangements using other waves" of the title requires careful consideration of G01B, G01C, G01P, and G01V that all cover the use of such waves for the measuring of similar variables like distance, velocity, direction, or location.

When propagation effects of waves are relevant (see definition below in the section Glossary of terms), G01B, G01C, and G01P all refer to G01S as being the appropriate place; however, there are some exceptions where propagation effects are relevant but the subject matter is classified elsewhere (see section References relevant to classification in this subclass below).

It is to be noted that this emphasis on propagation effects does not preclude subject matter from being classified in G01S when propagation effects are irrelevant to that subject matter.

Radar, Sonar, Lidar, or analogous systems specifically designed for geophysical use are classified in G01V. However, they are also classified in G01S if they are of general interest.

Insert: The following <u>two</u> <u>new</u> References sections: Application-oriented references and Informative references.

References

Application-oriented references

Examples of places where the subject matter of this place is covered when specially adapted, used for a particular purpose, or incorporated in a larger system:

Measuring volume flow of fluids or fluid solids by propagation effects of electromagnetic or other waves	G01F 1/66
Measuring direction or velocity of flowing fluids or of solid bodies relative to fluids using propagation effects of waves	G01P 5/00
Radar, Sonar, Lidar, or analogous systems specifically designed for geophysical use	G01V
Active systems for generating focusing signals	G02B 7/28
Navigation systems for traffic control purposes, i. e. systems in which the navigation is not performed autonomously by or in the vehicles, but where the vehicles are guided by instructions transmitted to them	G08G
Proximity switches	H03K 17/945, H03K 17/965

Informative references

Attention is drawn to the following places, which may be of interest for search:

Measuring distances by optical means between spaced objects when propagation effects are irrelevant	G01B 11/14
Passive optical systems for measuring distances in line of sight or transverse to line of sight, respectively	G01C 3/00; G01C 5/00
Navigation not using radio waves when propagation effects are not relevant; navigation beyond position fixing, determining velocity of a vehicle or craft or its direction of velocity	G01C 21/00
Determining velocities by optical means when propagation effects are not relevant	G01P 3/36
Determining presence, absence, or direction of movement	G01P 13/00
Prospecting by optical means; detecting the presence of objects or masses by optical means, e.g. by interruption of beams, i.e. light barriers	G01V 8/00
Measuring dimensions or angles of objects	G01B
Navigation in general	G01C

Measuring infrasonic, sonic or ultrasonic vibrations in general	G01H
Measuring infra-red, visible, or ultra-violet radiation in general	G01J
Transducers per se, see the following relevant subclasses	G01L, H01L, H04R
Investigating materials by optical radiation, microwaves or acoustic waves	G01N
Measuring direction or velocity of flowing fluids by reception or emission of radio waves or other waves and based on propagation effects caused in the fluid itself	G01P
Measuring electric or magnetic variables in general	G01R
Detecting masses or objects by methods not involving reflection or reradiation of radio, acoustic, or other waves; prospecting	G01V
Optical systems	G02B
Control of position, course, altitude or attitude	G05D
Time-interval measuring	G04F
Detecting the presence of objects for the purpose of counting them	G06M 7/00, G06M 11/00
Traffic control systems; anti-collision systems	G08G
Aerials	H01Q

Insert: The following <u>new</u> Glossary of terms section.

Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

Waves	Is the mechanism by which energy is transported without the transfer of matter. Waves may be either electromagnetic waves, which do not require a medium to propagate, or mechanical waves, which require a medium, e.g. acoustic waves. Waves most easily are defined in mathematical terms as obeying a so-called wave equation.
Propagation effects	Are relevant if the outcome of a measurement depends on the actual value of a physical quantity characterising the propagation of the wave, i.e. its wavelength, frequency, velocity, or phase. The mere presence or direction of a wave are not considered a propagation effect or to contribute to a propagation effect. To put it in another way, propagation effects are irrelevant, if the radiation may be looked upon as a beam of radiation whose wave nature can be ignored. Examples of measurements where propagation effects

	are relevant include e.g. measurements of propagation time, phase difference, phase delay, measurements using the Doppler effect, or interference.
Navigation	Is in this subclass limited to position fixing, or determining the velocity or direction of velocity of vehicles or crafts or their distance from other objects.
Reflection	Means the general physical phenomenon that propagating waves are being scattered by any object, body or target in their path. Scattering can be elastic (i.e. the frequencies of the incoming and outgoing waves are the same) or inelastic (i.e. the respective frequencies are different). Other properties of the wave may change as well. Reflection can be specular or diffuse depending on surface properties of the scattering object. Reradiation further includes the mechanism characteristic of a transponder, i.e. receiving a wave and then transmitting an answering wave.
Transponder	Means an arrangement which reacts to an incoming interrogating or detecting wave by emitting a specific answering or identifying wave.
Active systems	Means systems comprising an artificial source for emitting waves. The propagating waves interact with at least one object and are eventually detected by the system. The interaction may consist in e.g. a reflection.
Passive systems	Means systems detecting waves that are not emitted by the measuring system itself (e.g. by the sun).
Object	An entity that is not part of the measuring device.

G01S 7/00

Insert: The following new Informative references section.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Apparatus for measuring unknown time-intervals by electronic means, e.g. Vernier method	G04F 10/00

G01S 7/03

References

Limiting references

Delete: The entire Limiting references section.

Informative references

Insert: The following four <u>new</u> rows in the existing Informative references table.

Schematics of pulsed transmitters	G01S 7/282
Schematics of non-pulsed transmitters	G01S 7/35
TR boxes	H01J 17/64
Impedance networks or resonators	H03H

G01S 7/292

References

Limiting references

Delete: The entire Limiting references section.

Insert: The following <u>new</u> Informative references section.

Informative references

Attention is drawn to the following places, which may be of interest for search:

Doppler systems	G01S 13/50
Pulsed radars discriminating between fixed and moving objects (e.g. with moving target indication (MTI), adaptive clutter cancellation, etc.)	G01S 13/52

G01S7/36

Limiting references

<u>Insert</u>:   The following two <u>new</u> rows in the existing Limiting references table.

Means providing a modification of the radiation pattern for cancelling noise, clutter or interfering signals, e.g. side lobe suppression, side lobe blanking, null-steering arrays	G01S 7/2813
Random interference pulse cancellers	G01S 7/2928

G01S7/38

Limiting references

<u>Replace</u>:   The existing row (Chaff (passive) H01Q 15/145) with the following <u>new</u> row.

Identification of radar signals	G01S 7/021

<u>Insert</u>:   The following <u>new</u> Informative references section.

Informative references

Attention is drawn to the following places, which may be of interest for search:

Reflecting surfaces comprising a plurality of reflecting particles, e.g. chaff	H01Q 15/145

G01S 7/491

Limiting references

<u>Delete</u>:   The entire Limiting references section.

Informative references

Replace: The text in the existing row of the Informative references table with the following text.

Pulsed lidars (ladars) discriminating between fixed and moving objects, e.g. with moving target indication, adaptive clutter cancellation	G01S 17/50

G01S 13/00

Limiting references

Delete: The entire Limiting references section.

Insert: The following new Informative references section.

Informative references

Attention is drawn to the following places, which may be of interest for search:

Systems for determining the direction of an object by means not employing reflection or reradiation, which are covered by groups	G01S 1/00, G01S 3/00
Systems for determining distance or velocity of an object by means not employing reflection or reradiation, which are covered by group	G01S 11/00
Using forward scattering and measuring material property	G01N

G01S 15/00

Limiting references

Delete: The entire Limiting references section.

Informative references

Insert: The following <u>new</u> row in the Informative references section.

Acoustic beamformers	G10K

G01S 17/00

Limiting references

Delete: The entire Limiting references section.

Informative references

Insert: The following two <u>new</u> rows in the Informative references section.

Photogrammetry or videogrammetry	G01C 11/00
Laser per se	H01S

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2. B. DEFINITIONS QUICK FIX

Symbol	Location of change (e.g., section title)	Existing reference symbol or text	Action; New symbol; New text
G01S 13/9303			Delete the entire definition.
G01S 17/026			Delete the entire definition.

NOTES:
- The table above is used for corrections or modifications to existing definitions, e.g. delete an entire definition or part thereof; propose new wording or modify wording of a section, change the symbol the definition is associated with, change or delete a reference symbol, etc.
- Do not delete (F) symbol definitions.

3.   REVISION CONCORDANCE LIST (RCL)

Type*	From CPC Symbol (existing)	To CPC Symbol(s)
D	G01S 13/9303	<administrative transfer to G01S 13/933>
D	G01S 13/9307	<administrative transfer to G01S 13/937>
D	G01S 2013/9332	<administrative transfer to G01S 2013/9315>
D	G01S 2013/9335	<administrative transfer to G01S 13/934>
D	G01S 2013/9339	<administrative transfer to G01S 2013/9329>
D	G01S 2013/9342	<administrative transfer to G01S 2013/9318>
D	G01S 2013/9346	<administrative transfer to G01S 2013/93185>
D	G01S 2013/935	<administrative transfer to G01S 2013/9319>
D	G01S 2013/9353	<administrative transfer to G01S 2013/932>
D	G01S 2013/9357	<administrative transfer to G01S 2013/9322>
D	G01S 2013/936	<administrative transfer to G01S 2013/9316>
D	G01S 2013/9364	<administrative transfer to G01S 2013/9324>
D	G01S 2013/9367	<administrative transfer to G01S 2013/9323>
D	G01S 2013/9371	<administrative transfer to G01S 2013/9327>
D	G01S 2013/9375	<administrative transfer to G01S 2013/93271>
D	G01S 2013/9378	<administrative transfer to G01S 2013/93272>
D	G01S 2013/9382	<administrative transfer to G01S 2013/93273>
D	G01S 2013/9385	<administrative transfer to G01S 2013/93274>
D	G01S 2013/9389	<administrative transfer to G01S 2013/93275>
D	G01S 2013/9392	<administrative transfer to G01S 2013/93276>
D	G01S 2013/9396	<administrative transfer to G01S 2013/93277>
D	G01S 13/94	<administrative transfer to G01S 13/935>
D	G01S 15/025	<administrative transfer to G01S 15/86>
D	G01S 17/023	<administrative transfer to G01S 17/86>
D	G01S 17/026	<administrative transfer to G01S 17/04>
D	G01S 17/102	<administrative transfer to G01S 17/26>
D	G01S 17/105	<administrative transfer to G01S 17/14>
D	G01S 17/107	<administrative transfer to G01S 17/18>
D	G01S 17/325	<administrative transfer to G01S 17/34>
C	G01S 17/89	G01S 17/89, G01S 17/894
D	G01S 17/895	<administrative transfer to G01S 17/90>
D	G01S 17/936	<administrative transfer to G01S 17/931>

* C = entries with modified file scope where reclassification of documents from the entries is involved; Q = new entries which are firstly populated with documents via administrative transfers from deleted (D) entries. Afterwards, the transferred documents into the Q entry will either stay or be moved to more appropriate entries, as determined by intellectual reclassification; D = deleted entries; F = frozen entries will be deleted once reclassification of documents from the entries is completed.

NOTES:
- Only C, D, F, and Q type entries are included in the table above.
- When multiple symbols are included in the "To" column, do not use ranges of symbols.
- For administrative transfer of documents, the following text should be used: "< administrative transfer to XX>", "<administrative transfer to XX and YY simultaneously>", or "<administrative transfer to XX, YY, ...and ZZ simultaneously>" when administrative transfer of the same documents is to more than one place.
- Administrative transfer to main trunk groups is assumed to be the source allocation type, unless otherwise indicated.
- Administrative transfer to 2000/Y series groups is assumed to be "additional information".
- If needed, instructions for allocation type should be indicated within the angle brackets using the abbreviations "ADD" or "INV": <administrative transfer to XX ADD>, <administrative transfer to XX INV>, or < administrative transfer to XX ADD, YY INV, ... and ZZ ADD simultaneously>.

- In certain situations, the "D" entries of 2000-series or Y-series groups may not require a destination ("To") symbol, however it is required to specify "<no transfer>" in the "To" column for such cases.
- RCL is not needed for finalisation projects.

4. CHANGES TO THE CPC-TO-IPC CONCORDANCE LIST (CICL)

CPC	**IPC**	**Action***
G01S 7/4861	G01S 7/4861	UPDATE
G01S 7/4863	G01S 7/4863	UPDATE
G01S 7/4865	G01S 7/4865	UPDATE
G01S 7/4866	G01S 7/4865	UPDATE
G01S 7/4911	G01S 7/4911	UPDATE
G01S 7/4912	G01S 7/4912	UPDATE
G01S 7/4913	G01S 7/4913	UPDATE
G01S 7/4914	G01S 7/4914	UPDATE
G01S 7/4915	G01S 7/4915	UPDATE
G01S 7/4916	G01S 7/4912	UPDATE
G01S 7/4917	G01S 7/4912	UPDATE
G01S 7/4918	G01S 7/4912	UPDATE
G01S 13/9303		DELETE
G01S 13/9307		DELETE
G01S 13/931	G01S 13/931	UPDATE
G01S 2013/9314	G01S 13/931	UPDATE
G01S 2013/9315	G01S 13/931	NEW
G01S 2013/9316	G01S 13/931	NEW
G01S 2013/9317	G01S 13/931	UPDATE
G01S 2013/9318	G01S 13/931	NEW
G01S 2013/93185	G01S 13/931	NEW
G01S 2013/9319	G01S 13/931	NEW
G01S 2013/932	G01S 13/931	NEW
G01S 2013/9321	G01S 13/931	UPDATE
G01S 2013/9322	G01S 13/931	NEW
G01S 2013/9323	G01S 13/931	NEW
G01S 2013/9324	G01S 13/931	NEW
G01S 2013/9325	G01S 13/931	UPDATE
G01S 2013/9327	G01S 13/931	NEW
G01S 2013/93271	G01S 13/931	NEW
G01S 2013/93272	G01S 13/931	NEW
G01S 2013/93273	G01S 13/931	NEW
G01S 2013/93274	G01S 13/931	NEW
G01S 2013/93275	G01S 13/931	NEW
G01S 2013/93276	G01S 13/931	NEW
G01S 2013/93277	G01S 13/931	NEW
G01S 2013/9328	G01S 13/931	UPDATE
G01S 2013/9329	G01S 13/931	NEW
G01S 13/933	G01S 13/933	NEW
G01S 2013/9332		DELETE
G01S 2013/9335		DELETE

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CPC	IPC	Action*
G01S 2013/9339		DELETE
G01S 13/934	G01S 13/934	NEW
G01S 2013/9342		DELETE
G01S 2013/9346		DELETE
G01S 2013/935		DELETE
G01S 13/935	G01S 13/935	NEW
G01S 2013/9353		DELETE
G01S 2013/9357		DELETE
G01S 2013/936		DELETE
G01S 2013/9364		DELETE
G01S 2013/9367		DELETE
G01S 13/937	G01S 13/937	NEW
G01S 2013/9371		DELETE
G01S 2013/9375		DELETE
G01S 2013/9378		DELETE
G01S 2013/9382		DELETE
G01S 2013/9385		DELETE
G01S 2013/9389		DELETE
G01S 2013/9392		DELETE
G01S 2013/9396		DELETE
G01S 13/94		DELETE
G01S 15/025		DELETE
G01S 15/86	G01S 15/86	NEW
G01S 15/931	G01S 15/931	UPDATE
G01S 2015/932	G01S 15/931	UPDATE
G01S 2015/933	G01S 15/931	UPDATE
G01S 2015/934	G01S 15/931	UPDATE
G01S 2015/935	G01S 15/931	UPDATE
G01S 2015/936	G01S 15/931	UPDATE
G01S 2015/937	G01S 15/931	UPDATE
G01S 2015/938	G01S 15/931	UPDATE
G01S 2015/939	G01S 15/931	UPDATE
G01S 17/023		DELETE
G01S 17/026		DELETE
G01S 17/04	G01S 17/04	NEW
G01S 17/102		DELETE
G01S 17/105		DELETE
G01S 17/107		DELETE
G01S 17/14	G01S 17/14	NEW
G01S 17/18	G01S 17/18	NEW
G01S 17/26	G01S 17/26	NEW
G01S 17/325		DELETE
G01S 17/34	G01S 17/34	NEW
G01S 17/86	G01S 17/86	NEW
G01S 17/875	G01S 17/875	UPDATE

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CPC	IPC	Action*
G01S 17/894	G01S 17/894	NEW
G01S 17/895		DELETE
G01S 17/90	G01S 17/90	NEW
G01S 17/931	G01S 17/931	NEW
G01S 17/933	G01S 17/933	UPDATE
G01S 17/936		DELETE

*Action column:
- For an (N) or (Q) entry, provide an IPC symbol and complete the Action column with "NEW."
- For an existing CPC main trunk entry or indexing entry where the existing IPC symbol needs to be changed, provide an updated IPC symbol and complete the Action column with "UPDATED."
- For a (D) CPC entry or indexing entry complete the Action column with "DELETE." IPC symbol does not need to be included in the IPC column.
- For an (N) 2000 series CPC entry which is positioned within the main trunk scheme (breakdown code) provide an IPC symbol and complete the action column with "NEW".
- For an (N) 2000 series CPC entry positioned at the end of the CPC scheme (orthogonal code), with no IPC equivalent, complete the IPC column with "CPCONLY" and complete the action column with "NEW".

NOTES:
- F symbols are not included in the CICL table above.
- T and M symbols are not included in the CICL table above unless a change to the existing IPC is desired.

5. CROSS-REFERENCE LIST (CRL)

Scheme references impacted by this revision project

Location of reference to be changed	Referenced subclass or group to be changed	Action; New reference symbol; New text
G01S13/86	G01S15/025	Replace symbol with G01S 15/86.
G01S13/86	G01S17/023	Replace symbol with G01S 17/86.
G01S2015/938	G01S2013/9389	Replace symbol with G01S 2013/93275.
G08G5/0086	G01S13/94	Replace symbol with G01S 13/935.
G08G5/045	G01S13/9303	Replace symbol with G01S 13/933.

Definitions references impacted by this revision project

Location of reference to be changed	Referenced subclass or group to be changed	Section of definition	Action; New reference symbol; New text
G05D1/00	G01S13/94	Informative references	Replace symbol with G01S 13/935.
G08G1/04	G01S17/026	Informative references	Replace symbol with G01S 17/04.
G08G5/00	G01S13/94	Informative references	Replace symbol with G01S 13/935.
G08G5/0086	G01S13/94	Informative references	Replace symbol with G01S 13/935.
G08G5/04	G01S13/9303	Informative references	Replace symbol with G01S 13/933.
G08G5/04	G01S13/94	Informative references	Replace symbol with G01S 13/935.
G08G5/045	G01S13/9303	Informative references	Replace symbol with G01S 13/933.
H01L31/16	G01S17/026	Informative references	Replace symbol with G01S 17/04.
H03K17/941	G01S17/026	Informative references	Replace symbol with G01S 17/04.
H03K17/941	G01S17/026	Limiting references	Replace symbol with G01S 17/04.

NOTES:
- The CRL tables above are used for changes to locations **outside** of the project scope. Changes to references in scheme titles or definitions inside the project scope will be reflected in the "scheme change" template or one of the "definition" templates.
- In addition to other changes proposed in the tables above, in the column titled "Referenced subclass or group to be changed," **referenced** D symbols should indicate an action of "delete" or should indicate a replacement symbol and **referenced** F symbols should indicate a replacement symbol.
- When a reference is deleted, text related to that reference will also be deleted unless other references or a range of references associated with the same text remain.