EUROPEAN PATENT OFFICE
U.S. PATENT AND TRADEMARK OFFICE

CPC NOTICE OF CHANGES 871

DATE: MAY 1, 2020

PROJECT RP0247

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

Action	Subclass	Group(s)
SCHEME:		
Symbols New:	G01S	5/01, 5/011, 5/012, 5/013, 5/014, 5/015, 5/016, 5/017, 5/018, 5/019, 5/0218, 5/02213, 5/02216, 5/0244, 5/0246, 5/0249, 5/02521, 5/02522, 5/02523, 5/02524, 5/02525, 5/02526, 5/02527, 5/02528, 5/02529, 5/0258, 5/02585, 5/0264, 5/02685, 5/0269, 5/02695, 5/0295, 5/02955
	G01S	19/485
	G01S	2205/01, 2205/02, 2205/03, 2205/04, 2205/05, 2205/06, 2205/07, 2205/08, 2205/09, 2205/10
Titles Changed:	G01S	5/0009, 5/02, 5/0215, 5/0221, 5/0226, 5/0236, 5/0242, 5/0247, 5/0252, 5/0257, 5/0263, 5/0268, 5/0294
	G01S	2205/00
Warnings New:	G01S	5/00, 5/01, 5/011, 5/012, 5/013, 5/014, 5/015, 5/016, 5/017, 5/018, 5/019, 5/02, 5/0205, 5/0215, 5/0218, 5/0221, 5/02213, 5/02216, 5/0242, 5/0244, 5/0246, 5/0249, 5/0252, 5/02521, 5/02522, 5/02523, 5/02524, 5/02525, 5/02526, 5/02527, 5/02528, 5/02529, 5/0257, 5/0258, 5/02585, 5/0263, 5/0264, 5/0268, 5/02685, 5/0269, 5/02695, 5/0295, 5/02955
	G01S	19/48, 19/485, 19/49
	G01S	2205/01, 2205/02, 2205/03, 2205/04, 2205/05, 2205/06, 2205/07, 2205/08, 2205/09, 2205/10
Notes New:	G01S	5/0252
DEFINITIONS:		
Definitions Deleted: (no frozen (F) symbol definitions should be deleted)	G01S	5/0215, 5/0226
Definitions New:	G01S	5/01, 5/011, 5/012, 5/013, 5/014, 5/015, 5/016, 5/017, 5/018, 5/019, 5/0218, 5/02213, 5/02216, 5/0244, 5/0246, 5/0249, 5/0252, 5/02521, 5/02522, 5/02523, 5/02524, 5/02525, 5/02527, 5/02528, 5/02529, 5/0258, 5/02585,

DATE: MAY 1, 2020

PROJECT RP0247

Action	Subclass	Group(s)
		5/0263, 5/0264, 5/0269, 5/02695, 5/0294, 5/0295, G01S 19/48
Definitions Modified:	G01S	5/00, 5/0009, 5/021, 5/0278

No other subclasses/groups are impacted by this Notice of Changes.

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)

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 (new or modified) "CPC only" text should normally be enclosed in {curly brackets}**	Transferred to#
C	G01S 5/00	0	Position-fixing by co-ordinating two or more direction or position line determinations; Position-fixing by co-ordinating two or more distance determinations {(using active systems G01S 13/00, G01S 15/00, G01S 17/00)}	G01S 5/00, G01S 5/01, G01S 5/011, G01S 5/012, G01S 5/013, G01S 5/014, G01S 5/015, G01S 5/016, G01S 5/017, G01S 5/018, G01S 5/019
M	G01S5/0009	1	{Transmission of position information to remote stations (involving assistance data G01S 5/0236)}	
U	G01S5/009	2	{Transmission of differential positioning data to mobile}	
N	G01S 5/01	1	{Determining conditions which influence positioning, e.g. radio environment, state of motion or energy consumption}	
N	G01S 5/011	2	{Identifying the radio environment}	
N	G01S 5/012	2	{Identifying whether indoors or outdoors}	
N	G01S 5/013	2	{Identifying areas in a building}	
N	G01S 5/014	2	{Identifying transitions between environments}	
N	G01S 5/015	3	{between indoor and outdoor environments}	
N	G01S 5/016	3	{between areas within a building}	
N	G01S 5/017	2	{Detecting state or type of motion}	
N	G01S 5/018	2	{Involving non-radio wave signals or measurements}	
N	G01S 5/019	2	{Energy consumption}	
C	G01S 5/02	1	using radio waves (using satellite radio beacon systems for determining position G01S 19/00)	G01S 5/02, G01S 5/01, G01S 5/011, G01S 5/012, G01S 5/013, G01S 5/014, G01S 5/015, G01S 5/016, G01S 5/017, G01S 5/018, G01S 5/019, G01S 5/0244, G01S 5/0246, G01S 5/0249, G01S 5/02524, G01S 5/02525, G01S

Type*	Symbol	Indent Level Number of dots (e.g. 0, 1, 2)	Title (new or modified) "CPC only" text should normally be enclosed in {curly brackets}**	Transferred to#
				5/02526, G01S 5/02527, G01S 5/02529, G01S 5/0269, G01S 5/02695 G01S 5/0295, G01S 5/02955, G01S 2205/01, G01S 2205/02, G01S 2205/03, G01S 2205/04, G01S 2205/05, G01S 2205/06, G01S 2205/07, G01S 2205/08, G01S 2205/09, G01S 2205/10
C	G01S 5/0205	2	{Details}	G01S 5/0205, G01S 5/01, G01S 5/011, G01S 5/013, G01S 5/012, G01S 5/014, G01S 5/015, G01S 5/016, G01S 5/017, G01S 5/018, G01S 5/019, G01S 5/0244
C	G01S 5/0215	3	{Interference}	G01S 5/0215, G01S 5/0218
N	G01S 5/0218	3	{Multipath in signal reception}	
C	G01S 5/0221	3	{Receivers}	G01S 5/0221, G01S 5/02213, G01S 5/02216
N	G01S 5/02213	4	{Receivers arranged in a network for determining the position of a transmitter}	
N	G01S 5/02216	5	{Timing or synchronisation of the receivers}	
M	G01S 5/0226	3	{Transmitters}	
M	G01S 5/0236	3	{Assistance data, e.g. base station almanac}	
C	G01S 5/0242	3	{Determining the position of transmitters to be subsequently used in positioning (G01S 5/0289 takes precedence)}	G01S 5/0242, G01S 5/0249
N	G01S 5/0244	3	{Accuracy or reliability of position solution or of measurements contributing thereto}	
N	G01S 5/0246	2	{involving frequency difference of arrival or Doppler measurements (G01S 5/02685 takes precedence)}	
M	G01S 5/0247	2	{Determining attitude}	
N	G01S 5/0249	2	{Determining position using measurements made by a non-stationary device other than the device whose position is being determined}	
C	G01S 5/0252	2	{Radio frequency fingerprinting}	G01S 5/0252, G01S 5/02521, G01S 5/02522, G01S 5/02523, G01S 5/02524, G01S 5/02525, G01S 5/02526, G01S 5/02527, G01S 5/02528, G01S 5/02529

Type*	Symbol	Indent Level Number of dots (e.g. 0, 1, 2)	Title (new or modified) "CPC only" text should normally be enclosed in {curly brackets}**	Transferred to#
N	G01S 5/02521	3	{using a radio-map}	
N	G01S 5/02522	4	{The radio-map containing measured values of non-radio values}	
N	G01S 5/02523	4	{Details of interaction of receiver with radio-map}	
N	G01S 5/02524	4	{Creating or updating the radio-map}	
N	G01S 5/02525	5	{Gathering the radio frequency fingerprints}	
N	G01S 5/02526	6	{using non-dedicated equipment, e.g. user equipment or crowd-sourcing}	
N	G01S 5/02527	5	{Detecting or resolving anomalies in the radio frequency fingerprints of the radio-map}	
N	G01S 5/02528	3	{Simulating radio frequency fingerprints}	
N	G01S 5/02529	3	{not involving signal parameters, i.e. only involving identifiers}	
C	G01S 5/0257	2	{Hybrid positioning (by coordinating position lines of different shape G01S 5/12)}	G01S 5/0257, G01S 5/0258, G01S 5/02585
N	G01S 5/0258	3	{by combining or switching between measurements derived from different systems}	
N	G01S 5/02585	4	{at least one of the measurements being a non-radio measurement}	
C	G01S 5/0263	3	{by combining or switching between positions derived from two or more separate positioning systems}	G01S 5/0263, G01S 5/0264
N	G01S 5/0264	4	{at least one of the systems being a non-radio wave positioning system}	
C	G01S 5/0268	3	{by deriving positions from different combinations of signals or of estimated positions in a single positioning system}	G01S 5/0268, G01S 5/02685
N	G01S 5/02685	4	{involving dead reckoning based on radio wave measurements}	
N	G01S 5/0269	2	{Inferred or constrained positioning, e.g. employing knowledge of the physical or electromagnetic environment, state of motion or other contextual information to infer or constrain a position}	
N	G01S5/02695	3	{Constraining the position to lie on a curve or surface}	
M	G01S 5/0294	2	{Trajectory determination or predictive filtering, e.g. target tracking or Kalman filtering}	

DATE: MAY 1, 2020

PROJECT RP0247

Type*	Symbol	Indent Level Number of dots (e.g. 0, 1, 2)	Title (new or modified) "CPC only" text should normally be enclosed in {curly brackets}**	Transferred to#
N	G01S 5/0295	2	{Proximity-based methods, e.g. position inferred from reception of particular signals}	
N	G01S 5/02955	3	{by computing a weighted average of the positions of the signal transmitters}	
C	G01S 19/48	4	by combining or switching between position solutions derived from the satellite radio beacon positioning system and position solutions derived from a further system	G01S 5/01, G01S 5/011, G01S 5/012, G01S 5/013, G01S 5/014, G01S 5/015, G01S 5/016, G01S 5/017, G01S 5/018, G01S 5/019, G01S 19/48, G01S 19/485
N	G01S 19/485	5	{whereby the further system is an optical system or imaging system}	
C	G01S 19/49	5	whereby the further system is an inertial position system, e.g. loosely-coupled	G01S 5/01, G01S 5/011, G01S 5/012, G01S 5/013, G01S 5/014, G01S 5/015, G01S 5/016, G01S 5/017, G01S 5/018, G01S 5/019, G01S 19/485, G01S 19/49
M	G01S 2205/00	0	Position-fixing by co-ordinating two or more direction or position line determinations; Position-fixing by co-ordinating two or more distance determinations	
U	G01S 2205/008	2	using a mobile telephone network	
N	G01S 2205/01	1	specially adapted for specific applications	
N	G01S 2205/02	2	Indoor	
N	G01S 2205/03	2	Airborne	
N	G01S 2205/04	2	Nautical	
N	G01S 2205/05	2	Anti-theft or abduction	
N	G01S 2205/06	2	Emergency	
N	G01S 2205/07	2	Military	
N	G01S 2205/08	2	Sport	
N	G01S 2205/09	2	for tracking people	
N	G01S 2205/10	3	Elderly or infirm	

*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 <u>subclasses</u>, 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} <u>are</u> 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 <u>must</u> 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 – TITLE: 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 5/00		Group G01S 5/00 is impacted by reclassification into groups G01S 5/01, G01S 5/011, G01S 5/012, G01S 5/013, G01S 5/014, G01S 5/015, G01S 5/016, G01S 5/017, G01S 5/018, and G01S 5/019. All groups listed in this Warning should be considered in order to perform a complete search.
N	G01S 5/01		Group G01S 5/01 is incomplete pending reclassification of documents from groups G01S 5/00, G01S 5/02, G01S 5/0205, G01S 19/48, and G01S 19/49. All groups listed in this Warning should be considered in order to perform a complete search.
N	G01S 5/011		Group G01S 5/011 is incomplete pending reclassification of documents from groups G01S 5/00, G01S 5/02, G01S 5/0205, G01S 19/48, and G01S 19/49. All groups listed in this Warning should be considered in order to perform a complete search.
N	G01S 5/012		Group G01S 5/012 is incomplete pending reclassification of documents from groups G01S 5/00, G01S 5/02, G01S 5/0205, G01S 19/48, and G01S 19/49. All groups listed in this Warning should be considered in order to perform a complete search.
N	G01S 5/013		Group G01S 5/013 is incomplete pending reclassification of documents from groups G01S 5/00, G01S 5/02, G01S 5/0205, G01S 19/48, and G01S 19/49. All groups listed in this Warning should be considered in order to perform a complete search.
N	G01S 5/014		Group G01S 5/014 is incomplete pending reclassification of documents from groups G01S 5/00, G01S 5/02, G01S 5/0205, G01S 19/48, and G01S 19/49. All groups listed in this Warning should be considered in order to perform a complete search.
N	G01S 5/015		Group G01S 5/015 is incomplete pending reclassification of documents from groups G01S 5/00, G01S 5/02, G01S 5/0205, G01S 19/48, and G01S 19/49. All groups listed in this Warning should be considered in order to perform a complete search.
N	G01S 5/016		Group G01S 5/016 is incomplete pending reclassification of documents from groups G01S 5/00, G01S 5/02, G01S 5/0205, G01S 19/48, and G01S 19/49. All groups listed in this Warning should be considered in order to perform a complete search.
N	G01S 5/017		Group G01S 5/017 is incomplete pending reclassification of documents from groups G01S 5/00, G01S 5/02, G01S 5/0205, G01S 19/48, and G01S 19/49. All groups listed in this Warning should be considered in order to perform a complete search.
N	G01S 5/018		Group G01S 5/018 is incomplete pending reclassification of documents from groups G01S 5/00, G01S 5/02, G01S 5/0205, G01S 19/48, and G01S 19/49. All groups listed in this Warning should be considered in order to perform a complete search.

N	G01S 5/019		Group G01S 5/019 is incomplete pending reclassification of documents from groups G01S 5/00, G01S 5/02, G01S 5/0205, G01S 19/48, and G01S 19/49. All groups listed in this Warning should be considered in order to perform a complete search.
N	G01S 5/02		Group G01S 5/02 is impacted by reclassification into groups G01S 5/01, G01S 5/011, G01S 5/012, G01S 5/013, G01S 5/014, G01S 5/015, G01S 5/016, G01S 5/017, G01S 5/018, G01S 5/019, G01S 5/0244, G01S 5/0246, G01S 5/0249, G01S 5/02524, G01S 5/02525, G01S 5/02526, G01S 5/02527, G01S 5/02529, G01S 5/0269, G01S 5/02695, G01S 5/0295, G01S 5/02955, G01S 2205/01, G01S 2205/02, G01S 2205/03, G01S 2205/04, G01S 2205/05, G01S 2205/06, G01S 2205/07, G01S 2205/08, G01S 2205/09, and G01S 2205/10. All groups listed in this Warning should be considered in order to perform a complete search.
N	G01S 5/0205		Group G01S 5/0205 is impacted by reclassification into groups G01S 5/01, G01S 5/011, G01S 5/013, G01S 5/012, G01S 5/014, G01S 5/015, G01S 5/016, G01S 5/017, G01S 5/018, G01S 5/019, and G01S 5/0244. All groups listed in this Warning should be considered in order to perform a complete search.
N	G01S 5/0215		Group G01S 5/0215 is impacted by reclassification into group G01S 5/0218. Groups G01S 5/0215 and G01S 5/0218 should be considered in order to perform a complete search.
N	G01S 5/0218		Group G01S 5/0218 is incomplete pending reclassification of documents from group G01S 5/0215. Groups G01S 5/0215 and G01S 5/0218 should be considered in order to perform a complete search.
N	G01S 5/0221		Group G01S 5/0221 is impacted by reclassification into groups G01S 5/02213 and G01S 5/02216. Groups G01S 5/0221, G01S 5/02213, and G01S 5/02216 should be considered in order to perform a complete search.
N	G01S 5/02213		Group G01S 5/02213 is incomplete pending reclassification of documents from group G01S 5/0221. Groups G01S 5/0221 and G01S 5/02213 should be considered in order to perform a complete search.
N	G01S 5/02216		Group G01S 5/02216 is incomplete pending reclassification of documents from group G01S 5/0221. Groups G01S 5/0221 and G01S 5/02216 should be considered in order to perform a complete search.
N	G01S 5/0242		Group G01S 5/0242 is impacted by reclassification into group G01S 5/0249. Groups G01S 5/0242 and G01S 5/0249 should be considered in order to perform a complete search.
N	G01S 5/0244		Group G01S 5/0244 is incomplete pending reclassification of documents from groups G01S 5/02 and G01S 5/0205. Groups G01S 5/02, G01S 5/0205, and G01S 5/0244 should be considered in order to perform a complete search.
N	G01S 5/0246		Group G01S 5/0246 is incomplete pending reclassification of documents from group G01S 5/02. Groups G01S 5/02 and G01S 5/0246 should be considered in order to perform a complete search.

N	G01S 5/0249		Group G01S 5/0249 is incomplete pending reclassification of documents from groups G01S 5/02 and G01S 5/0242. Groups G01S 5/02, G01S 5/0242, and G01S 5/0249 should be considered in order to perform a complete search.
N	G01S 5/0252		Group G01S 5/0252 is impacted by reclassification into groups G01S 5/02521, G01S 5/02522, G01S 5/02523, G01S 5/02524, G01S 5/02525, G01S 5/02526, G01S 5/02527, G01S 5/02528, and G01S 5/02529. All groups listed in this Warning should be considered in order to perform a complete search.
N	G01S 5/02521		Group G01S 5/02521 is incomplete pending reclassification of documents from group G01S 5/0252. Groups G01S 5/0252 and G01S 5/02521 should be considered in order to perform a complete search.
N	G01S 5/02522		Group G01S 5/02522 is incomplete pending reclassification of documents from group G01S 5/0252. Groups G01S 5/0252 and G01S 5/02522 should be considered in order to perform a complete search.
N	G01S 5/02523		Group G01S 5/02523 is incomplete pending reclassification of documents from group G01S 5/0252. Groups G01S 5/0252 and G01S 5/02523 should be considered in order to perform a complete search.
N	G01S 5/02524		Group G01S 5/02524 is incomplete pending reclassification of documents from groups G01S 5/02 and G01S 5/0252. Groups G01S 5/02, G01S 5/0252, and G01S 5/02524 should be considered in order to perform a complete search.
N	G01S 5/02525		Group G01S 5/02525 is incomplete pending reclassification of documents from groups G01S 5/02 and G01S 5/0252. Groups G01S 5/02, G01S 5/0252, and G01S 5/02525 should be considered in order to perform a complete search.
N	G01S 5/02526		Group G01S 5/02526 is incomplete pending reclassification of documents from groups G01S 5/02 and G01S 5/0252. Groups G01S 5/02, G01S 5/0252, and G01S 5/02526 should be considered in order to perform a complete search.
N	G01S 5/02527		Group G01S 5/02527 is incomplete pending reclassification of documents from groups G01S 5/02 and G01S 5/0252. Groups G01S 5/02, G01S 5/0252, and G01S 5/02527 should be considered in order to perform a complete search.
N	G01S 5/02528		Group G01S 5/02528 is incomplete pending reclassification of documents from group G01S 5/0252. Groups G01S 5/0252 and G01S 5/02528 should be considered in order to perform a complete search.
N	G01S 5/02529		Group G01S 5/02529 is incomplete pending reclassification of documents from groups G01S 5/02 and G01S 5/0252. Groups G01S 5/02, G01S 5/0252, and G01S 5/02529 should be considered in order to perform a complete search.
N	G01S 5/0257		Group G01S 5/0257 is impacted by reclassification into groups G01S 5/0258 and G01S 5/02585. Groups G01S 5/0257, G01S 5/0258, and G01S 5/02585 should be considered in order to perform a complete search.

N	G01S 5/0258		Group G01S 5/0258 is incomplete pending reclassification of documents from group G01S 5/0257. Groups G01S 5/0257 and G01S 5/0258 should be considered in order to perform a complete search.
N	G01S 5/02585		Group G01S 5/02585 is incomplete pending reclassification of documents from group G01S 5/0257. Groups G01S 5/0257 and G01S 5/02585 should be considered in order to perform a complete search.
N	G01S 5/0263		Group G01S 5/0263 is impacted by reclassification into group G01S 5/0264. Groups G01S 5/0263 and G01S 5/0264 should be considered in order to perform a complete search.
N	G01S 5/0264		Group G01S 5/0264 is incomplete pending reclassification of documents from group G01S 5/0263. Groups G01S 5/0263 and G01S 5/0264 should be considered in order to perform a complete search.
N	G01S 5/0268		Group G01S 5/0268 is impacted by reclassification into group G01S 5/02685. Groups G01S 5/0268 and G01S 5/02685 should be considered in order to perform a complete search.
N	G01S 5/02685		Group G01S 5/02685 is incomplete pending reclassification of documents from group G01S 5/0268. Groups G01S 5/0268 and G01S 5/02685 should be considered in order to perform a complete search.
N	G01S 5/0269		Group G01S 5/0269 is incomplete pending reclassification of documents from group G01S 5/02. Groups G01S 5/02 and G01S 5/0269 should be considered in order to perform a complete search.
N	G01S 5/02695		Group G01S 5/02695 is incomplete pending reclassification of documents from group G01S 5/02. Groups G01S 5/02 and G01S 5/02695 should be considered in order to perform a complete search.
N	G01S 5/0295		Group G01S 5/0295 is incomplete pending reclassification of documents from group G01S 5/02. Groups G01S 5/02 and G01S 5/0295 should be considered in order to perform a complete search.
N	G01S 5/02955		Group G01S 5/02955 is incomplete pending reclassification of documents from group G01S 5/02. Groups G01S 5/02 and G01S 5/02955 should be considered in order to perform a complete search.
N	G01S 19/48		Group G01S 19/48 is impacted by reclassification into groups G01S 5/01, G01S 5/011, G01S 5/012, G01S 5/013, G01S 5/014, G01S 5/015, G01S 5/016, G01S 5/017, G01S 5/018, G01S 5/019, and G01S 19/485. All groups listed in this Warning should be considered in order to perform a complete search.
N	G01S 19/485		Group G01S 19/485 is incomplete pending reclassification of documents from groups G01S 19/48 and G01S 19/49. Groups G01S 19/48, G01S 19/49, and G01S 19/485 should be considered in order to perform a complete search.
N	G01S 19/49		Group G01S 19/49 is impacted by reclassification into groups G01S 5/01, G01S 5/011, G01S 5/012, G01S 5/013, G01S 5/014, G01S 5/015, G01S 5/016, G01S 5/017, G01S 5/018, G01S 5/019, and G01S 19/485. All groups listed in this Warning should be considered in order to perform a complete search.

N	G01S 2205/01		Group G01S 2205/01 is incomplete pending reclassification of documents from group G01S 5/02. Groups G01S 5/02 and G01S 2205/01 should be considered in order to perform a complete search.
N	G01S 2205/02		Group G01S 2205/02 is incomplete pending reclassification of documents from group G01S 5/02. Groups G01S 5/02 and G01S 2205/02 should be considered in order to perform a complete search.
N	G01S 2205/03		Group G01S 2205/03 is incomplete pending reclassification of documents from group G01S 5/02. Groups G01S 5/02 and G01S 2205/03 should be considered in order to perform a complete search.
N	G01S 2205/04		Group G01S 2205/04 is incomplete pending reclassification of documents from group G01S 5/02. Groups G01S 5/02 and G01S 2205/04 should be considered in order to perform a complete search.
N	G01S 2205/05		Group G01S 2205/05 is incomplete pending reclassification of documents from group G01S 5/02. Groups G01S 5/02 and G01S 2205/05 should be considered in order to perform a complete search.
N	G01S 2205/06		Group G01S 2205/06 is incomplete pending reclassification of documents from group G01S 5/02. Groups G01S 5/02 and G01S 2205/06 should be considered in order to perform a complete search.
N	G01S 2205/07		Group G01S 2205/07 is incomplete pending reclassification of documents from group G01S 5/02. Groups G01S 5/02 and G01S 2205/07 should be considered in order to perform a complete search.
N	G01S 2205/08		Group G01S 2205/08 is incomplete pending reclassification of documents from group G01S 5/02. Groups G01S 5/02 and G01S 2205/08 should be considered in order to perform a complete search.
N	G01S 2205/09		Group G01S 2205/09 is incomplete pending reclassification of documents from group G01S 5/02. Groups G01S 5/02 and G01S 2205/09 should be considered in order to perform a complete search.
N	G01S 2205/10		Group G01S 2205/10 is incomplete pending reclassification of documents from group G01S 5/02. Groups G01S 5/02 and G01S 2205/10 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.

DATE: MAY 1, 2020

PROJECT RP0247

C. New, Modified or Deleted Note(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 Note	New/Modified Note
N	G01S 5/0252		In this group, the following terms are used with the meaning indicated: - Radio frequency fingerprints mean measurements or simulated values of radio frequency signal parameters, e.g. receiver signal strength indicator [RSSI] or identifiers or access point identifiers [ApIds] combined with coordinates of the positions at which the radio frequency fingerprints were measured. - "Radio-map" means a collection of radio frequency fingerprints.

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

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

2. A. DEFINITIONS (new)

Insert: the following new Definitions.

G01S 5/01

Definition statement

*This place covers***:**

All aspects which influence the how, when and if a position should be determined.
Examples of such are:

- If it is determined that a device is found to be in an outdoor environment, GPS
  may be considered to be the most efficient positioning method.
- If a device is found to be moving very slowly, very infrequent measurements of
  position may be acceptable in order to reduce energy consumption.
- If a device is in a stairwell, the use of GPS should be avoided and a barometer
  instrument should be used for position determination.

References

Informative references

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

Details related to interference or mitigating interference	G01S 5/0215
Details related to multipath in signal reception	G01S 5/0218
Hybrid positioning by combining or switching between positions derived from two or more separate positioning systems	G01S 5/0263
Details related to receiver power consumption	G01S 19/34
Position determining by combining or switching between position solutions derived from the satellite radio beacon positioning system and position solutions derived from further systems	G01S 19/48

Special rules of classification

Additional allocation should be considered in G01S 5/0215, G01S 5/0218, G01S 5/0263, G01S 19/34, and G01S 19/48 if appropriate.

G01S 5/011

Definition statement

This place covers:

Identifying specific radio environment conditions appropriate for an object position determination, e.g. high incidence of multipath, poor signal reception conditions, high interference levels.

G01S 5/012

Definition statement

This place covers:

Identifying whether an object is considered to be indoors or outdoors.
Notes:
- "Indoors" is considered to refer to inside man-made structures.
- In general, signal received inside a structure from transmitters outside the structure tends to be very weak.
- In general, indoor environments tend to suffer from multipath phenomena. Identification of a receiver/transmitter as being indoors may require a positioning method that is based on inertial signals or short range signals
- Such positioning methods are often preferable to GPS in an indoor environment.

Relationships with other classification places

Identifying from received signals whether the receiver is indoors or outdoors and accordingly whether using an indoor position technique or an outdoor position technique is more appropriate is classified here, in G01S5/012.
Identifying a particular location from received signals should be allocated in G01S 5/0269.

G01S 5/013

Definition statement

This place covers:

Identifying in which type of area, e.g. large room, stairwell, lift, or corridor, of a building a device is located. Accordingly, a positioning algorithm which is optimised for such an environment can be chosen.

Relationships with other classification places

G01S 5/0269 should be allocated in the case of identifying a particular location, e.g. a particular stairwell, or corridor, from received signals.

G01S 5/014

Definition statement

This place covers:

Identifying that a device has moved from one environment to another, e.g. moving from a corridor to a stairwell, passing under a bridge, entering a tunnel, changing from a rural to an urban environment.

Relationships with other classification places

G01S 5/0269 should be allocated in the case of identifying that the transition allows one to pinpoint a particular position, e.g. detecting from a sudden disappearance and reappearance of GPS signals that one has passed under a particular bridge on a motorway.

G01S 5/015

Definition statement

This place covers:

Identifying that a device has moved into or out of a building, this often will be suggested by the sudden appearance or disappearance of GPS signals.

Relationships with other classification places

Where the identification of the transition allows one to pinpoint a particular position (e.g. where the transition unambiguously suggests a particular position, e.g. the doorway of a building with a single door or entry gate of an underground car-park, G01S 5/0269 should be allocated.

G01S 5/016

Definition statement

This place covers:

Identifying that a device has transitioned between different areas of a building, e.g. entering an area of the building with lots of windows such that GPS reception is possible, entering a stairwell or a lift.

Relationships with other classification places

Where the identification of the transition allows one to pinpoint a particular position (e.g. where the transition unambiguously suggests a particular position, e.g. only stairwell in a building, G01S 5/0269 should be allocated.

G01S 5/017

Definition statement

This place covers:

Among others, detecting whether a device is stationary (in which case position determination could be suspended), whether that pattern of movement suggests that the device is carried by a pedestrian, or that the device is travelling in a car of train.

Informative references

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

Determination of movement/velocity by radar	G01S 13/50
Radio wave determination of movement/velocity without reflection or reradiation	G01S 11/02

G01S 5/018

Definition statement

This place covers:

Using non-radio wave signals to identify conditions for positioning, e.g. detecting natural light, noise patterns or temperature can indicate whether a device is likely to be in an indoor or outdoor environment, or in a multipath environment.

G01S 5/019

Definition statement

This place covers:

Power saving, energy consumption and other related issues which can affect the choice of positioning algorithm.

Relationships with other classification places

Allocation of G01S 19/34 or G01S 5/0221 may also be necessary, particularly if the energy saving technique reduces energy without any particular relation to the choice of position determination routine. One example where G01S 19/34 might be allocated without the allocation of G01S 5/019 is where low-power components are employed in the GPS receiver, with no mention of using an alternative to GPS in the determination of position.

G01S 5/0218

Definition statement

This place covers:

Multipath detection and/or mitigation in signal reception.

Relationships with other classification places

This group does not relate to how signals which are subject to multipath are subsequently used in determining position. This aspect is addressed in G01S 5/0273. It

may be necessary to classify a document in either or both of G01S 5/0218 and G01S 5/0273 depending on which or both the invention refers to.

Where the multipath detection is in the context of determining the electrical environment in which the position device find itself, in order to decide on how best to carry out position determination, G01S 5/01 should also be allocated to the document.

References

Informative references

Using multipath or indirect path propagation signals in position determination	G01S 5/0273

G01S 5/02213

Definition statement

This place covers:

Details of networks of receivers for determining position. Typically, aspects such as synchronisation, aspects of communication between the receivers, type and makeup of the receivers is intended.

Relationships with other classification places

Although G01S has a main group entry (G01S 1/00) for the system aspects of networked beacons systems which provide signals received by a mobile receiver which determines its position from these signals, it does not, as yet have an entry for the reciprocal arrangement - i.e. the network aspects of a network of receivers which determine the position of a transmitter. This subgroup is to address this need.

G01S 5/02216

Definition statement

This place covers:

Details of networks of receivers for determining position in which timing or synchronisation of the receivers are the focus.

G01S 5/0244

Definition statement

This place covers:

Determinations or indications of accuracy, reliability, plausibility and other similar indicators of positions determined and/or measurements.

G01S 5/0246

Definition statement

This place covers:

Positioning methods such as frequency difference of arrival (FDOA) etc., and other techniques where a position can be determined using Doppler measurements.

Limiting references

This place does not cover:

Where the Doppler measurements are employed for dead reckoning purposes, e.g. in place of measurements from an inertial sensor.	G01S 5/02685

G01S 5/0249

Definition statement

This place covers:

Using measurements from a moving receiver to determine position. One illustrative example of what is expected in this place is the following: instead of the position of a

transmitter being determined from signals received by multiple stationary receivers, one or more receivers make measurements at different places, essentially mimicking the situation of having stationary receivers.

Relationships with other classification places

This method of determining position of transmitters is often used in G01S 5/0242. It may be necessary to classify such in both G01S 5/0242 and in G01S 5/0249.

G01S 5/0252

Definition statement

This place covers:

Positioning techniques where a database (radio-map) of measurements has been created with radio wave measurements indexed against position coordinates of where the radio wave measurements were made (rf fingerprints), this database is subsequently queried for determining position of other devices.

Alternatively, if the radio environment is accurately known (e.g. where most significant propagation parameters are known), it is possible to simulate the measurements to be used in the database rather than having to physically carry out measurements.

In this subgroup the term "Radio frequency fingerprints" is used to refer to the use of measurements of signal parameters, e.g. Received Signal Strength Indicator [RSSI], signal phase, or differences in times of arrival) and to the use of identifiers, e.g. SSIDs or ApIds, transmitted on a signal.

G01S 5/02521

Definition statement

This place covers:

Where position is determined by comparing measured values, e.g. RSSI, RTT or other measured parameters of signals, or identifiers, e.g. SSIDs, with a radio-map, i.e. a database of previously measured values or identifiers indexed against the position at which they were measured.

G01S 5/02522

Definition statement

This place covers:

Arrangements where measurements of further values, e.g. acoustics signals, pressure, or temperature, are stored along with the radio wave measurements or identifiers.

G01S 5/02523

Definition statement

This place covers:

Aspects such as protocol, timing, encryption, compression, refresh rate used for transmitting database items to the receiver. It also relates to how much data is downloaded by the receiver, and when, etc.

G01S 5/02524

Definition statement

This place covers:

- Updating aspects of areas in a region that are visited in order to collect rf measurements or identifiers.
- Aspects related to what level of precision (granularity) the measurements are to be made in a region, and how frequently a region should be revisited.

G01S 5/02525

Definition statement

This place covers:

Aspects such as the path taken by a receiver when collecting rf measurements or identifiers, rate at which measurements are taken etc.

G01S 5/02527

Definition statement

This place covers:

- aspects such as detecting inconsistencies in the database measurements, etc. which may be brought about e.g. by nearby transmitters being relocated or reconfigured.
- methods of resolving and compensating for such anomalies.

G01S 5/02528

Definition statement

This place covers:

Cases where simulated fingerprints are generated.

G01S 5/02529

Definition statement

This place covers:

Cases where only identifiers (and not measurements such as RSSIs) have been stored in the radio-map.

G01S 5/0258

Definition statement

This place covers:

Cases where measurements from different sources, e.g. wifi signals, inertial signals, barometric values, light signals, or acoustic signals, are combined to determine a position of a receiver.

Relationships with other classification places

Where at least one of the signals is a GPS signal, G01S 19/45 should be allocated instead of G01S 5/0258 (see limiting reference at G01S 5/02).

G01S 5/0258 differs from G01S 5/0263 in that G01S 5/0263 relates to combining position solutions (rather than measurements) from different systems. The following example should clarify the situation: in a scenario where several wifi signals and several cellular signals are available, if all (or several) signals are combined to determine the position, G01S 5/0258 is allocated; where two separate positions are calculated using exclusively the wifi signals and exclusively cellular signals respectively, and a final solution is determined as a weighted average of the two, G01S 5/0263 is allocated.

G01S 5/02585

Definition statement

This place covers:

Determining position using a combination of radio wave signal(s) and e.g. acoustic, light, pressure, etc signals. Tightly coupled radio wave + inertial navigation systems are also covered.

Relationships with other classification places

Where at least one of the signals is a GPS signal, G01S 19/45 should be allocated instead of G01S 5/02585 (see limiting reference at G01S 5/02).

G01S 5/02585 differs from G01S 5/0264 in that G01S 5/0264 relates to combining position solutions (rather than measurements) from different systems. The following example should clarify the situation: in a scenario where several wifi signals and several acoustic signals are available, if all (or several) measurements of signals are combined to determine the position, G01S 5/02585 is allocated; where two separate positions are calculated using exclusively the wifi signals and exclusively acoustic signals respectively, and a final solution is determined as a weighted average of the two, G01S 5/0264 is allocated.

Where position is determined using e.g. dead reckoning, i.e. where an initial position is determined using radio wave signals, and a dead reckoning is done either in parallel or during periods when radio wave signals are not available, G01S 5/0264 is allocated.

G01S 5/0263

Definition statement

This place covers:

- weighted averages of positions determined using two different type of system, e.g. cellular system and inertial system.
- switching between the determination of position using wifi signals to the determination of position using cellular signals.
- weighted average of position determined using radio fingerprints and position determined using an optical receiver.
- determining position using inertial based dead reckoning combined with position determined from cellular signals.

Note:

The term "positioning systems" is interpreted quite broadly to include any system transmitting sufficient similar signals for the determination of position, i.e. cellular signals, wifi signals (however not a single cellular signal + a single wifi signal + a single nfc signal).

Relationships with other classification places

Where the combination involves a position determined using GPS signals, G01S 19/48 should be allocated (see limiting reference at G01S 5/02).

G01S 5/0264

Definition statement

This place covers:

- positioning methods involving combinations of or switching between positions derived from radio signals, e.g. cellular signals or wifi signals, and non-radio wave positioning systems, e.g. inertial positioning systems, imaging systems, etc.

- methods where dead reckoning using inertial sensors to extrapolate between positions derived from radio wave signals

Informative references

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

Inertial navigation	G01C 21/16

G01S 5/0269

Definition statement

This place covers:

Inferring position using knowledge of:
- physical environment, e.g. using knowledge of a map of a building to limit possible positions
- electromagnetic environment, e.g. suddenly and short lived loss of a signal arising from the receiver passing under a bridge
- state of motion, e.g. speed profile of a receiver suggesting that it is on a train entering or leaving a station

An illustrative example of constraining a position is: a receiver on a train being constrained to lie on a train line.

Relationships with other classification places

The techniques involved in inferring position can be similar to those for determining an electromagnetic environment, such as covered by G01S 5/011. The difference between these subgroups is how the determination of the environment is subsequently used. If the determination of environment is only for the purposes of choosing a particular positioning method, then G01S 5/011 is allocated. If the determination of the environment is specific enough to indicate the position of the device to be positioned, then G01S 5/0269 is allocated. However, it may be necessary to allocate both symbols.

Where a position is inferred as that of e.g. a wifi access point from which a signal has been received, G01S 5/0295 is allocated.

G01S 5/02695

Definition statement

This place covers:

Devices to be located travelling on railways, travelling on a road, restricted to particular corridors of building etc. In general, when the curve upon which a device is to travel is known, fewer radio-wave measurements are required than in the case of TDOA position determination etc.

G01S 5/0294

Definition statement

This place covers:

Trajectory determination and general target tracking.

Facets:
In this group, tracking is used to imply employing predictive filtering and other techniques such as determine the position of a target. In general, this group relates to scenarios where predictive filtering will be necessary in order to be able to continuously determine the position of a target. It is not intended for simply "keeping track of" inventory items, taxis, where determination of position of the items is relatively uncomplicated.

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

Logistics, e.g. warehousing, loading, distribution or shipping; Inventory or stock management, e.g. order filling, procurement or balancing against orders	G06Q 10/08

G01S 5/0295

Definition statement

This group covers:

Methods where the location is taken from the location of a transmitter whose signal is received and in general involves reading the ID of the transmitter, rather than a measurement of any parameter, e.g. signal strength, angle of arrival, or time of arrival, of the signal received.

The following are examples of documents found in this subgroup:
- taking the position of receiver to be the position of an access point, when the receiver receives a signal from that access point;
- taking the position of a cellular phone to be that of the centre of the cell sector in which it finds itself.

Relationships with other classification places

It may be necessary to also consult G01S 5/02529 during search. The subject-matter of G01S 5/0295 and G01S 5/02529 are not unlike one another. Where a list of identifiers is used purely to look up a corresponding position at which this combination was measured, a symbol in G01S 5/0252 (mostly likely G01S 5/02529) is appropriate; however, where the determination of position is determined based on the coordinates of the transmitters whose I.D. has been read, then a G01S 5/0295 symbol should be allocated.

G01S 19/48

Definition statement

This group covers:

By a combination of GPS and another positioning technique, e.g. from Wifi signals, or by switching between the two techniques. Switching between routines is often done when the electromagnetic environment, energy requirements, state of movement in which the receiver finds itself is more or less suitable for position determination by GPS.

Relationships with other classification places

G01S 5/01 should be allocated where the electromagnetic environment, e.g. multipath or suggesting an indoor rather than an outdoor environment, or any other aspect which

would determine the choice of combination/switch of positioning technique, is determined.

2. A. DEFINITIONS (modified)

G01S 5/00

Definition statement

This place covers:

Replace: the existing text with the following.

- Determination of position using radio, optical (including infrared) and acoustic waves by co-ordinating two or more direction or position line determinations
- Position fixing by co-ordinating two or more distance determinations
- Radio Fingerprinting, e.g. correlating positions with signal measurements in a database such that the position of a receiver or a transmitter can be determined by database query.

Delete: the entire Limiting references section.

Delete: the entire Special rules of classification section.

Insert: the following new Relationships with other classification places section.

Relationships with other classification places

Passive, as distinct from active - involving reflection or reradiation - found in G01S13/00, G01S15/00, G01S17/00, form the vast bulk of inventions found in the G01S5/00. However, inventions involving re-radiation (G01S13/74, G01S13/876, G01S13/878) in which the underlying principle is akin to a passive system, with the initial illumination of a target acting like a trigger for transmission may also be classified here.

The schemes relating to the different wave types (i.e. radio, optical, acoustic) would be expected to mirror each other. For practical reasons, subgroups analogous to each of the subgroups of G01S5/02 have not been created in G01S5/16 or G01S5/18. Classification of documents related to G01S5/16 and G01S5/18 will be carried out in a

manner analogous to G01S5/02, i.e. where a document refers to aspects which are of inherently involved in the measurement of position, but do not describe the measurement of position itself, e.g. signal details, constructional details of transmitters, then G01S5/18 should be allocated (as no equivalent of G01S5/0205 exists) and not merely one of the subgroups G01S5/20 - G01S5/30.
Where combinations of signals between acoustic or optical with radio comprise the invention, these inventions should be classified in G01S5/0257.

G01S 5/0009

Insert: the following new Definition statement.

Definition statement
This place covers:

Transmission of data between stations. In general, the subgroups of G01S 5/0009 relate to transmission of either measurements of signals which allow for locating a receiver or transmitter, or the transmission of the position of the located receiver or transmitter.

References

Limiting references
This place does not cover:

Replace: the existing Limiting references table with the following table.

Involving assistance data	G01S 5/0236

Insert: the following new Informative references section.

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

Transmission of measured values	G08C
Service making use of the location of users or terminals	H04W 4/02

Special rules of classification

Replace: the existing text with the following.

G01S5/0009 and its subgroups relate to transmission of position information between a remote station and reference station or between remote stations or reference stations. However, inventions are classified in these subgroups only where the transmission of information is related to the calculation of position. It is not intended to cover transmission of positioning data or position related data in applications in which the positioning arrangement is merely a black box. Inventions should be assigned G01S5/0009 only if the invention would also have warranted G01S5/00 outside of G01S5/0009 and its subgroups.

G01S 5/021

Insert: the following new Definition statement.

Definition statement

This place covers:

Detection and/or correction or incorrect operation of transmitters of receivers employed in position determination. Where transmitters involved are dedicated positioning beacons or the receivers are designed for operation using signals from dedicated positioning beacons, G01S 1/022 should be allocated. Accuracy or reliability of positions determined: G01S 5/0244.

References

Limiting references

This place does not cover:

Replace: the existing Limiting references table with the following table.

Radio frequency fingerprinting	G01S 5/0252

G01S 5/0278

References

Limiting references

This place does not cover:

Replace: the existing Limiting references table with the following.

Radio frequency fingerprinting	G01S 5/0252
Trajectory determination or predictive filtering, e.g. target tracking, Kalman filtering	G01S 5/0294

2. B. DEFINITIONS QUICK FIX

Symbol	Location of change (e.g., section title)	Existing reference symbol or text	Action; New symbol; New text
G01S 5/0215	Entire definition		DELETE entire definition
G01S 5/0226	Entire definition		DELETE 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.

DATE: MAY 1, 2020

PROJECT RP0247

3.   REVISION CONCORDANCE LIST (RCL)

Type*	From CPC Symbol (existing)	To CPC Symbol(s)
C	G01S 5/00	G01S 5/00, G01S 5/01, G01S 5/011, G01S 5/012, G01S 5/013, G01S 5/014, G01S 5/015, G01S 5/016, G01S 5/017, G01S 5/018, G01S 5/019
C	G01S 5/02	G01S 5/02, G01S 5/01, G01S 5/011, G01S 5/012, G01S 5/013, G01S 5/014, G01S 5/015, G01S 5/016, G01S 5/017, G01S 5/018, G01S 5/019, G01S 5/0244, G01S 5/0246, G01S 5/0249, G01S 5/02524, G01S 5/02525, G01S 5/02526, G01S 5/02527, G01S 5/02529, G01S 5/0269, G01S 5/02695, G01S 5/0295, G01S 5/02955, G01S 2205/01, G01S 2205/02, G01S 2205/03, G01S 2205/04, G01S 2205/05, G01S 2205/06, G01S 2205/07, G01S 2205/08, G01S 2205/09, G01S 2205/10
C	G01S 5/0205	G01S 5/0205, G01S 5/01, G01S 5/011, G01S 5/013, G01S 5/012, G01S 5/014, G01S 5/015, G01S 5/016, G01S 5/017, G01S 5/018, G01S 5/019, G01S 5/0244
C	G01S 5/0215	G01S 5/0215, G01S 5/0218
C	G01S 5/0221	G01S 5/0221, G01S 5/02213, G01S 5/02216
C	G01S 5/0242	G01S 5/0242, G01S 5/0249
C	G01S 5/0252	G01S 5/0252, G01S 5/02521, G01S 5/02522, G01S 5/02523, G01S 5/02524, G01S 5/02525, G01S 5/02526, G01S 5/02527, G01S 5/02528, G01S 5/02529
C	G01S 5/0257	G01S 5/0257, G01S 5/0258, G01S 5/02585
C	G01S 5/0263	G01S 5/0263, G01S 5/0264
C	G01S 5/0268	G01S 5/0268, G01S 5/02685
C	G01S 19/48	G01S 5/01, G01S 5/011, G01S 5/012, G01S 5/013, G01S 5/014, G01S 5/015, G01S 5/016, G01S 5/017, G01S 5/018, G01S 5/019, G01S 19/48, G01S 19/485
C	G01S 19/49	G01S 5/01, G01S 5/011, G01S 5/012, G01S 5/013, G01S 5/014, G01S 5/015, G01S 5/016, G01S 5/017, G01S 5/018, G01S 5/019, G01S 19/485, G01S 19/49

* 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.

DATE: MAY 1, 2020

PROJECT RP0247

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

CPC	IPC	Action*
G01S 5/01	G01S 5/00	NEW
G01S 5/011	G01S 5/00	NEW
G01S 5/012	G01S 5/00	NEW
G01S 5/013	G01S 5/00	NEW
G01S 5/014	G01S 5/00	NEW
G01S 5/015	G01S 5/00	NEW
G01S 5/016	G01S 5/00	NEW
G01S 5/017	G01S 5/00	NEW
G01S 5/018	G01S 5/00	NEW
G01S 5/019	G01S 5/00	NEW
G01S 5/0218	G01S 5/02	NEW
G01S 5/02213	G01S 5/02	NEW
G01S 5/02216	G01S 5/02	NEW
G01S 5/0244	G01S 5/02	NEW
G01S 5/0246	G01S 5/02	NEW
G01S 5/0249	G01S 5/02	NEW
G01S 5/02521	G01S 5/02	NEW
G01S 5/02522	G01S 5/02	NEW
G01S 5/02523	G01S 5/02	NEW
G01S 5/02524	G01S 5/02	NEW
G01S 5/02525	G01S 5/02	NEW
G01S 5/02526	G01S 5/02	NEW
G01S 5/02527	G01S 5/02	NEW
G01S 5/02528	G01S 5/02	NEW
G01S 5/02529	G01S 5/02	NEW
G01S 5/0258	G01S 5/02	NEW
G01S 5/02585	G01S 5/02	NEW
G01S 5/0264	G01S 5/02	NEW
G01S 5/02685	G01S 5/02	NEW
G01S 5/0269	G01S 5/02	NEW
G01S 5/02695	G01S 5/02	NEW
G01S 5/0295	G01S 5/02	NEW
G01S 5/02955	G01S 5/02	NEW
G01S 19/485	G01S 19/48	NEW
G01S 2205/01	CPCONLY	NEW
G01S 2205/02	CPCONLY	NEW
G01S 2205/03	CPCONLY	NEW
G01S 2205/04	CPCONLY	NEW
G01S 2205/05	CPCONLY	NEW
G01S 2205/06	CPCONLY	NEW
G01S 2205/07	CPCONLY	NEW
G01S 2205/08	CPCONLY	NEW

DATE: MAY 1, 2020

PROJECT RP0247

CPC	IPC	Action*
G01S 2205/09	CPCONLY	NEW
G01S 2205/10	CPCONLY	NEW

*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.