

EUROPEAN PATENT OFFICE
U.S. PATENT AND TRADEMARK OFFICE

CPC NOTICE OF CHANGES 1430

DATE: MAY 1, 2023

PROJECT RP11520

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

<u>Action</u>	<u>Subclass</u>	<u>Group(s)</u>
SCHEME:		
Symbols New:	H04B	17/191, 17/201, 17/202, 17/203, 17/204, 17/22, 17/221, 17/25, 17/252, 17/253, 17/254, 17/255, 17/294, 17/295, 17/296, 17/297, 17/328, 17/346, 17/347
Titles Changed:	H04B	17/101, 17/102, 17/103, 17/345, 17/373, 17/3912, 17/3913
Warnings New:	H04B	17/15, 17/191, 17/20, 17/201, 17/21, 17/22, 17/25, 17/29, 17/294, 17/295, 17/296, 17/297, 17/309, 17/318, 17/328, 17/346, 17/347
DEFINITIONS:		
Definitions New:	H04B	17/295, 17/345, 17/346, 17/3912

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

This Notice of Changes includes the following [Check the ones included]:

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)

CPC NOTICE OF CHANGES 1430

DATE: MAY 1, 2023

PROJECT RP11520

1. CLASSIFICATION SCHEME CHANGES

A. New, Modified or Deleted Group(s)

SUBCLASS H04B17/00 - Monitoring; Testing (of line transmission systems H04B 3/46; arrangements for monitoring or testing transmission systems employing electromagnetic waves other than radio waves H04B 10/07)

<u>Type*</u>	<u>Symbol</u>	<u>Indent Level Number of dots (e.g. 0, 1, 2)</u>	<u>Title</u> “CPC only” text should normally be enclosed in {curly brackets}**	<u>Transferred to#</u>
U	H04B 17/00	0	Monitoring; Testing (of line transmission systems H04B 3/46; arrangements for monitoring or testing transmission systems employing electromagnetic waves other than radio waves H04B 10/07)	
U	H04B 17/10	1	of transmitters	
M	H04B 17/101	2	{for measurement of specific parameters of the transmitter or components thereof}	
M	H04B 17/102	3	{Power radiated at antenna}	
M	H04B 17/103	3	{Reflected power, e.g. return loss}	
C	H04B 17/15	2	Performance testing	H04B 17/15, H04B 17/191
U	H04B 17/19	3	Self-testing arrangements	
N	H04B17/191	3	{Over-the-air testing}	
C	H04B 17/20	1	of receivers	H04B 17/20, H04B 17/201, H04B 17/202, H04B 17/203, H04B 17/204, H04B 17/22, H04B 17/221, H04B 17/25, H04B 17/252, H04B 17/253, H04B 17/254, H04B 17/255
N	H04B 17/201	2	{for measurement of specific parameters of the receiver or components thereof}	
N	H04B 17/202	3	{Power received at the antenna}	
N	H04B 17/203	3	{Receiver sensitivity}	
N	H04B 17/204	3	{of interfering signals, e.g. passive intermodulation}	
C	H04B 17/21	2	for calibration; for correcting measurements	H04B17/21, H04B 17/22, H04B 17/221
N	H04B 17/22	3	{for calibration of the receiver components}	
N	H04B 17/221	4	{of receiver antennas, e.g. as to amplitude or phase}	

CPC NOTICE OF CHANGES 1430

DATE: MAY 1, 2023

PROJECT RP11520

<u>Type*</u>	<u>Symbol</u>	<u>Indent Level Number of dots (e.g. 0, 1, 2)</u>	<u>Title</u> <u>“CPC only” text should normally be enclosed in {curly brackets}**</u>	<u>Transferred to#</u>
U	H04B 17/24	2	with feedback of measurements to the transmitter	
N	H04B 17/25	2	{taking multiple measurements}	
N	H04B 17/252	3	{measuring signals from different transmission points or directions of arrival, e.g. in multi RAT or dual connectivity}	
N	H04B 17/253	3	{measuring at different locations or reception points}	
N	H04B 17/254	3	{measuring at different reception times}	
N	H04B 17/255	3	{measuring at different states of transmission, e.g. active or idle; measuring at different measurement rates; measuring with different measurement schedules}	
C	H04B 17/29	2	Performance testing	H04B 17/29, H04B 17/294, H04B 17/295, H04B 17/296, H04B 17/297
N	H04B 17/294	3	{with test equipment located at the receiver}	
N	H04B 17/295	3	{Detection of non-compliance or faulty performance, e.g. response deviations (monitoring during normal operations H04B 17/296)}	
N	H04B 17/296	3	{Monitoring performance during normal operation}	
N	H04B 17/297	3	{Self-testing arrangements}	
U	H04B 17/30	1	of propagation channels	
C	H04B 17/309	2	Measuring or estimating channel quality parameters	H04B 17/309, H04B 17/346, H04B 17/347
C	H04B 17/318	3	Received signal strength	H04B 17/318, H04B 17/328
U	H04B 17/327	4	Received signal code power [RSCP]	
N	H04B 17/328	4	{Reference signal received power [RSRP]; Reference signal received quality [RSRQ]}	
M	H04B 17/345	3	Interference values ({signal-to-interference ratio [SIR] or carrier-to-interference ratio [CIR]} H04B 17/336)	
N	H04B 17/346	3	{Noise values (signal-to-interference ratio [SIR] or carrier-to-interference ratio [CIR] H04B 17/336)}	
N	H04B 17/347	3	{Path loss}	
M	H04B 17/373	2	Predicting channel quality {or other radio frequency [RF]} parameters	
M	H04B 17/3912	3	{Simulation models, e.g. distribution of spectral power density or received signal strength indicator [RSSI] for a given geographic region}	

CPC NOTICE OF CHANGES 1430

DATE: MAY 1, 2023

PROJECT RP11520

<u>Type*</u>	<u>Symbol</u>	<u>Indent Level Number of dots (e.g. 0, 1, 2)</u>	<u>Title</u> “CPC only” text should normally be enclosed in {curly brackets}**	<u>Transferred to#</u>
M	H04B 17/3913	3	{Predictive models, e.g. based on neural network models }	

*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.

CPC NOTICE OF CHANGES 1430

DATE: MAY 1, 2023

PROJECT RP11520

B. New, Modified or Deleted Warning(s)

SUBCLASS H04B17/00 - Monitoring; Testing (of line transmission systems H04B 3/46; arrangements for monitoring or testing transmission systems employing electromagnetic waves other than radio waves H04B 10/07)

<u>Type*</u>	<u>Location</u>	<u>Old Warning</u>	<u>New/Modified Warning</u>
N	H04B 17/15		Group H04B 17/15 is impacted by reclassification into group H04B 17/191. Groups H04B 17/15 and H04B 17/191 should be considered in order to perform a complete search.
N	H04B 17/191		Group H04B 17/191 is incomplete pending reclassification of documents from group H04B 17/15. Groups H04B 17/15 and H04B 17/191 should be considered in order to perform a complete search.
N	H04B 17/20		Group H04B 17/20 is impacted by reclassification into groups H04B 17/201, H04B 17/202, H04B 17/203, H04B 17/204, H04B 17/22, H04B 17/221, H04B 17/25, H04B 17/252, H04B 17/253, H04B 17/254 and H04B 17/255. All groups listed in this Warning should be considered in order to perform a complete search.
N	H04B 17/201		Groups H04B 17/201, H04B 17/202, H04B 17/203 and H04B 17/204 are incomplete pending reclassification of documents from group H04B 17/20. All groups listed in this Warning should be considered in order to perform a complete search.
N	H04B 17/21		Group H04B 17/21 is impacted by reclassification into groups H04B 17/22 and H04B 17/221. Groups H04B 17/21, H04B 17/22 and H04B 17/221 should be considered in order to perform a complete search.
N	H04B 17/22		Groups H04B 17/22 and H04B 17/221 are incomplete pending reclassification of documents from groups H04B 17/20 and H04B 17/21. All groups listed in this Warning should be considered in order to perform a complete search.
N	H04B 17/25		Groups H04B 17/25, H04B 17/252, H04B 17/253, H04B 17/254 and H04B 17/255 are incomplete pending reclassification of documents from group H04B 17/20. All groups listed in this Warning should be considered in order to perform a complete search.
N	H04B 17/29		Group H04B 17/29 is impacted by reclassification into groups H04B 17/294, H04B 17/295, H04B 17/296 and H04B 17/297. All groups listed in this Warning should be considered in order to perform a complete search.
N	H04B 17/294		Group H04B 17/294 is incomplete pending reclassification of documents from group H04B 17/29. Groups H04B 17/29 and H04B 17/294 should be considered in order to perform a complete search.
N	H04B 17/295		Group H04B 17/295 is incomplete pending reclassification of documents from group H04B 17/29. Groups H04B 17/29 and H04B 17/295 should be considered in order to perform a complete search.
N	H04B 17/296		Group H04B 17/296 is incomplete pending reclassification of documents from group H04B 17/29. Groups H04B 17/29 and

CPC NOTICE OF CHANGES 1430

DATE: MAY 1, 2023

PROJECT RP11520

<u>Type*</u>	<u>Location</u>	<u>Old Warning</u>	<u>New/Modified Warning</u>
			H04B 17/296 should be considered in order to perform a complete search.
N	H04B 17/297		Group H04B 17/297 is incomplete pending reclassification of documents from group H04B 17/29. Groups H04B 17/29 and H04B 17/297 should be considered in order to perform a complete search.
N	H04B 17/309		Group H04B 17/309 is impacted by reclassification into groups H04B 17/346 and H04B 17/347. Groups H04B 17/309, H04B 17/346 and H04B 17/347 should be considered in order to perform a complete search.
N	H04B 17/318		Group H04B 17/318 is impacted by reclassification into group H04B 17/328. Groups H04B 17/318 and H04B 17/328 should be considered in order to perform a complete search.
N	H04B 17/328		Group H04B 17/328 is incomplete pending reclassification of documents from group H04B 17/318. Groups H04B 17/318 and H04B 17/328 should be considered in order to perform a complete search.
N	H04B 17/346		Group H04B 17/346 is incomplete pending reclassification of documents from group H04B 17/309. Groups H04B 17/309 and H04B 17/346 should be considered in order to perform a complete search.
N	H04B 17/347		Group H04B 17/347 is incomplete pending reclassification of documents from group H04B 17/309. Groups H04B 17/309 and H04B 17/347 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)

Insert: The following new Definitions.

H04B 17/295

References

Limiting references

This place does not cover:

Monitoring during normal operation	H04B 17/296
------------------------------------	-----------------------------

Informative references

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

Measuring or estimating channel quality parameters	H04B 17/309
Predicting channel quality or other RF parameters	H04B 17/373

H04B 17/345

References

Limiting references

This place does not cover:

Signal-to-interference ratio [SIR] or carrier-to-interference ratio [CIR]	H04B 17/336
---	-----------------------------

Informative references

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

Noise values	H04B 17/346
--------------	-----------------------------

DATE: MAY 1, 2023

PROJECT RP11520

H04B 17/346

References

Limiting references

This place does not cover:

Signal-to-interference ration [SIR] or carrier-to-interference ratio [CIR]	H04B 17/336
--	-----------------------------

H04B 17/3912

References

Informative references

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

Fading models or fading generators	H04B 17/3911
Predictive models	H04B 17/3913

CPC NOTICE OF CHANGES 1430

DATE: MAY 1, 2023

PROJECT RP11520

3. REVISION CONCORDANCE LIST (RCL)

<u>Type*</u>	<u>From CPC Symbol (existing)</u>	<u>To CPC Symbol(s)</u>
C	H04B 17/15	H04B 17/15, H04B 17/191
C	H04B 17/20	H04B 17/20, H04B 17/201, H04B 17/202, H04B 17/203, H04B 17/204, H04B 17/22, H04B 17/221, H04B 17/25, H04B 17/252, H04B 17/253, H04B 17/254, H04B 17/255
C	H04B 17/21	H04B 17/21, H04B 17/22, H04B 17/221
C	H04B 17/29	H04B 17/29, H04B 17/294, H04B 17/295, H04B 17/296, H04B 17/297
C	H04B 17/309	H04B 17/309, H04B 17/346, H04B 17/347
C	H04B 17/318	H04B 17/318, H04B 17/328

* 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.

CPC NOTICE OF CHANGES 1430

DATE: MAY 1, 2023

PROJECT RP11520

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

<u>CPC</u>	<u>IPC</u>	<u>Action*</u>
H04B 17/191	H04B 17/15	NEW
H04B 17/201	H04B 17/20	NEW
H04B 17/202	H04B 17/20	NEW
H04B 17/203	H04B 17/20	NEW
H04B 17/204	H04B 17/20	NEW
H04B 17/22	H04B 17/21	NEW
H04B 17/221	H04B 17/21	NEW
H04B 17/25	H04B 17/20	NEW
H04B 17/252	H04B 17/20	NEW
H04B 17/253	H04B 17/20	NEW
H04B 17/254	H04B 17/20	NEW
H04B 17/255	H04B 17/20	NEW
H04B 17/294	H04B 17/29	NEW
H04B 17/295	H04B 17/29	NEW
H04B 17/296	H04B 17/29	NEW
H04B 17/297	H04B 17/29	NEW
H04B 17/328	H04B 17/318	NEW
H04B 17/346	H04B 17/309	NEW
H04B 17/347	H04B 17/309	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.