EUROPEAN PATENT OFFICE
U.S. PATENT AND TRADEMARK OFFICE

CPC NOTICE OF CHANGES 1423

DATE: MAY 1, 2023

PROJECT RP11757

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

Action	Subclass	Group(s)
SCHEME:		
Symbols Deleted:	H04W	28/0804, 28/0808, 28/0812, 28/0815, 28/0819, 28/0823, 28/0842, 28/085
Symbols New:	H04W	28/082, 28/084, 28/086, 28/0861, 28/0862, 28/0864, 28/0865, 28/0866, 28/088
Titles Changed:	H04W	28/00, 28/0289, 28/08
Warnings New:	H04W	28/0289, 28/08, 28/084
	H04W	36/22
Warnings Modified:	H04W	Subclass
	H04W	72/12
DEFINITIONS:		
Definitions New:	H04W	28/082, 28/084, 28/086, 28/088
Definitions Modified:	H04W	28/08

The following subclasses/groups are also impacted by this Notice of Changes (indicate subclasses/groups outside of the project scope, such as those listed in the CRL): H04W 36/22, H04W 72/12

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)

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1. CLASSIFICATION SCHEME CHANGES

   A. New, Modified or Deleted Group(s)

SUBCLASS H04W - WIRELESS COMMUNICATION NETWORKS (broadcast communication H04H; communication systems using wireless links for non-selective communication, e.g. wireless extensions H04M1/72)

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	H04W 28/00	0	Network traffic management; Network resource management	
C	H04W 28/0289	2	{Congestion control (load shedding arrangements in network planning H04W 16/08; performing reselection for handling the traffic H04W 36/22; wireless traffic scheduling H04W 72/12)}	H04W 28/0289, H04W 28/084
C	H04W 28/08	2	Load balancing or load distribution (transferring a connection for handling the traffic H04W 36/22; wireless traffic scheduling H04W 72/12)	H04W 28/08 H04W 28/084 H04W 36/22 H04W 72/12
D	H04W 28/0804	3	{between access entities (reselecting a network for handling traffic H04W 36/22; wireless resource allocation where an allocation plan is defined based on load H04W 72/52)}	\<administrative transfer to H04W 28/086\>
D	H04W 28/0808	4	{between base stations}	\<administrative transfer to H04W 28/0861\>
D	H04W 28/0812	5	{of same hierarchy level}	\<administrative transfer to H04W 28/0862\>
D	H04W 28/0815	5	{of different hierarchy levels, e.g. Master Evolved Node B [MeNB] or Secondary Evolved node B [SeNB]}	\<administrative transfer to H04W 28/0864\>
D	H04W 28/0819	5	{of different Radio Access Technologies [RATs], e.g. LTE or WiFi}	\<administrative transfer to H04W 28/0865\>
N	H04W 28/082	3	among bearers or channels	
D	H04W 28/0823	4	{between wireless and wire-based access points, e.g. via LTE and via DSL connected access points}	\<administrative transfer to H04W 28/0866\>
U	H04W 28/0838	4	{User device}	
N	H04W 28/084	3	among network function virtualisation [NFV] entities; among edge computing entities, e.g. multi-access edge computing	
D	H04W 28/0842	3	{among core entities}	\<administrative transfer to H04W 28/088\>
D	H04W 28/085	3	{among bearers or channels}	\<administrative transfer to H04W 28/082\>
U	H04W 28/0858	3	{among entities in the uplink}	

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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#
N	H04W 28/086	3	among access entities	
N	H04W 28/0861	4	{between base stations}	
N	H04W 28/0862	5	{of same hierarchy level}	
N	H04W 28/0864	5	{of different hierarchy levels, e.g. Master Evolved Node B [MeNB] or Secondary Evolved node B [SeNB]}	
N	H04W 28/0865	5	{of different Radio Access Technologies [RATs], e.g. LTE or WiFi}	
N	H04W 28/0866	4	{between wireless and wire-based access points, e.g. via LTE and via DSL connected access points}	
U	H04W 28/0875	3	{to or through Device to Device [D2D] links, e.g. direct-mode links}	
N	H04W 28/088	3	among core entities	

*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 H04W - WIRELESS COMMUNICATION NETWORKS (broadcast communication H04H; communication systems using wireless links for non-selective communication, e.g. wireless extensions H04M1/72)

Type*	Location	Old Warning	New/Modified Warning
M	H04W	In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme. The following IPC groups are not in the CPC scheme. The subject matter for these IPC groups is classified in the following CPC groups: H04W 28/082 covered by H04W 28/085 H04W 28/084 covered by H04W 28/08 H04W 28/086 covered by H04W 28/0804 H04W 28/088 covered by H04W 28/0842	In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.
N	H04W 28/0289		Group H04W 28/0289 is impacted by reclassification into group H04W 28/084. Groups H04W 28/0289 and H04W 28/084 should be considered in order to perform a complete search.
M	H04W 28/08	Group H04W 28/08 is impacted by re-classification into groups H04W 28/0804-H04W 28/0846 and groups H04W 28/0858 -H04W 28/0992. All groups listed in this Warning should be considered in order to perform a complete search.	Group H04W 28/08 is impacted by reclassification into groups H04W 28/084, H04W 36/22, and H04W 72/12. All groups listed in this Warning should be considered in order to perform a complete search.
N	H04W 28/084		Group H04W 28/084 is incomplete pending reclassification of documents from groups H04W 28/0289 and H04W 28/08. Groups H04W 28/0289, H04W 28/08 and H04W 28/084 should be considered in order to perform a complete search.

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Type*	Location	Old Warning	New/Modified Warning
N	H04W 36/22		Group H04W 36/22 is incomplete pending reclassification of documents from group H04W 28/08. Groups H04W 28/08 and H04W 36/22 should be considered in order to perform a complete search.
M	H04W 72/12	Group H04W 72/12 is impacted by reclassification into groups H04W 72/40, H04W 72/50, H04W 72/51, and H04W 72/512. All groups listed in this Warning should be considered in order to perform a complete search.	Group H04W 72/12 is incomplete pending reclassification of documents from group H04W 28/08. Group H04W 72/12 is also impacted by reclassification into groups H04W 72/40, H04W 72/50, H04W 72/51, and H04W 72/512. All groups listed in this Warning 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 new Definitions.

H04W 28/082

Definition statement

This place covers:

Load balancing or load distribution among channels or bearers, such as based on channel or bearer status.

References

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

Reselecting a communication resource in the serving access point	H04W 36/06

H04W 28/084

Definition statement
This place covers:

Load balancing or load distribution among network function virtualisation [NFV] or edge computing entities, such as based on status of network function virtualization [NFV] or edge computing entities, such as multi-access edge computing, etc.

H04W 28/086

Definition statement

This place covers:

Load balancing or load distribution among access entities, such as based on access entities status.

Informative references

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

Reselecting an access point	H04W 36/08

H04W 28/088

Definition statement

This place covers:

Load balancing or load distribution among core entities, such as based on core entities status.

Informative references

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

Reselecting a serving backbone network switching or routing node	H04W 36/12

2. A. DEFINITIONS (modified)

H04W 28/08

References

Insert: The following new Limiting references section.

Limiting references

This place does not cover:

Transferring a connection for handling the traffic	H04W 36/22
Wireless traffic scheduling	H04W 72/12

Informative references

Delete: The following reference from the Informative references table.

Hand off or reselecting arrangements for handling the traffic	H04W 36/22

3.   REVISION CONCORDANCE LIST (RCL)

Type*	From CPC Symbol (existing)	To CPC Symbol(s)
C	H04W 28/0289	H04W 28/0289, H04W 28/084
C	H04W 28/08	H04W 28/08, H04W 28/084, H04W 36/22, H04W 72/12
D	H04W 28/0804	<administrative transfer to H04W 28/086>
D	H04W 28/0808	<administrative transfer to H04W 28/0861>
D	H04W 28/0812	<administrative transfer to H04W 28/0862>
D	H04W 28/0815	<administrative transfer to H04W 28/0864>
D	H04W 28/0819	<administrative transfer to H04W 28/0865>
D	H04W 28/0823	<administrative transfer to H04W 28/0866>
D	H04W 28/0842	<administrative transfer to H04W 28/088>
D	H04W 28/085	<administrative transfer to H04W 28/082>

* 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.

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

CPC	**IPC**	**Action***
H04W 28/0804		DELETE
H04W 28/0808		DELETE
H04W 28/0812		DELETE
H04W 28/0815		DELETE
H04W 28/0819		DELETE
H04W 28/082	H04W 28/082	NEW
H04W 28/0823		DELETE
H04W 28/084	H04W 28/084	NEW
H04W 28/0842		DELETE
H04W 28/085		DELETE
H04W 28/086	H04W 28/086	NEW
H04W 28/0861	H04W 28/086	NEW
H04W 28/0862	H04W 28/086	NEW
H04W 28/0864	H04W 28/086	NEW
H04W 28/0865	H04W 28/086	NEW
H04W 28/0866	H04W 28/086	NEW
H04W 28/088	H04W 28/088	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.