

EUROPEAN PATENT OFFICE
U.S. PATENT AND TRADEMARK OFFICE

CPC NOTICE OF CHANGES 557

AUGUST 1, 2018

PROJECT RP0245

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:	H04W	36/0007
	H04W	36/0009
	H04W	36/0058
	H04W	36/0069
	H04W	36/0079
	H04W	36/00835
	H04W	36/00837
	H04W	36/0085
	H04W	36/03
	H04W	36/125
	H04W	36/305
Indents Changed:	H04W	36/0088
	H04W	36/0094
Warnings New:	H04W	36/00, 36/0005, 36/0007, 36/0009, 36/0055, 36/0058, 36/0069, 36/0079, 36/0083, 36/00835, 36/00837, 36/0085, 36/03, 36/12, 36/125, 36/30, 36/305
DEFINITIONS:		
Definitions New:	H04W	36/0007
	H04W	36/0009
	H04W	36/0058
	H04W	36/0069
	H04W	36/00835
	H04W	36/00837
	H04W	36/0085
	H04W	36/03
	H04W	36/125
	H04W	36/305
	H04W	36/0079
Definitions Modified:	H04W	36/0061
	H04W	36/04

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

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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 COMMUNICATIONS NETWORKS (radio transmission systems H04B7/00; transmission systems using electromagnetic waves other than radio waves, e.g. light, infrared H04B10/00; communication systems using wireless extensions, i.e. wireless links without selective communication, e.g. cordless telephones H04M1/72; broadcast communication H04H)

<u>Type*</u>	<u>Symbol</u>	<u>Indent Level Number of dots (e.g. 0, 1, 2)</u>	<u>Title (new or modified)</u> <u>“CPC only” text should normally be enclosed in {curly brackets}**</u>	<u>Transferred to[#]</u>
C	H04W 36/00	0	Hand-off or reselection arrangements	H04W 36/00, H04W 36/03
C	H04W 36/0005	1	{Control or signalling for completing the hand-off}	H04W 36/0005, H04W 36/0007, H04W 36/0009
N	H04W 36/0007	2	{for multicast or broadcast services, e.g. MBMS (multicast or broadcast application services H04W 4/06; resource management for broadcast services H04W 72/005; connection management for selective distribution or broadcast H04W 76/40)}	
N	H04W 36/0009	2	{for a plurality of users or terminals, e.g. group communication or moving wireless networks (user group management H04W 4/08; processing of subscriber group data H04W 8/186)}	
C	H04W 36/0055	2	{Transmission and use of information for re-establishing the radio link}	H04W 36/0055, H04W 36/0058, H04W 36/0069, H04W36/0079
N	H04W 36/0058	3	{Transmission of hand-off measurement information, e.g. measurement reports}	
U	H04W 36/0066	3	{of control information between different types of networks in order to establish a new radio link in the target network}	
N	H04W 36/0069	3	{in case of dual connectivity, e.g. CoMP, decoupled uplink/downlink or carrier aggregation (allocation of physical resources in CoMP or in carrier aggregation H04L 5/0035)}	
U	H04W 36/0077	3	{of access information of target access point}	
N	H04W 36/0079	3	{in case of hand-off failure or rejection}	
C	H04W 36/0083	2	{Determination of parameters used for hand-off, e.g. generation or modification of neighbour cell lists}	H04W 36/0083, H04W 36/00835, H04W 36/00837, H04W 36/0085

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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	H04W 36/00835	3	{Determination of the neighbour cell list}	
N	H04W 36/00837	3	{Determination of triggering parameters for hand-off}	
N	H04W 36/0085	3	{Hand-off measurements}	
M	H04W 36/0088	4	{Scheduling hand-off measurements}	
M	H04W 36/0094	4	{Definition of hand-off measurement parameters}	
U	H04W 36/026	2	{Multicasting of data during hand-off}	
N	H04W 36/03	1	{Reselecting a link using a direct mode connection}	
C	H04W 36/12	1	Reselecting a serving backbone network switching or routing node	H04W 36/12, H04W 36/125
N	H04W 36/125	2	{involving different types of service backbone}	
C	H04W 36/30	2	by measured or perceived connection quality data	H04W 36/30, H04W 36/305, H04W 36/0079
N	H04W 36/305	3	{Reselection due to radio link failure (control signalling for hand-off failure H04W 36/0079)}	

*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; E= 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).

For U groups, the minimum requirement is to include the U group located immediately prior to the N group or N group array, in order to show the N group hierarchy and improve the readability and understanding of the scheme. 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 except “D” which requires only a symbol.

#“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>” or “<administrative transfer to XX and YY simultaneously>” when administrative transfer of the same documents is to more than one place.

Administrative transfer to main trunk groups is assumed to be “invention information”, unless otherwise indicated, and to 2000 series groups is assumed to be “additional information”.

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B. New, Modified or Deleted Warning notice(s)

SUBCLASS H04W - WIRELESS COMMUNICATIONS NETWORKS

<u>Type*</u>	<u>Location</u>	<u>Old Warning notice</u>	<u>New/Modified Warning notice</u>
N	H04W 36/00		Group H04W 36/00 is impacted by reclassification into group H04W 36/03. Groups H04W 36/00 and H04W 36/03 should be considered in order to perform a complete search.
N	H04W 36/03		Group H04W 36/03 is incomplete pending reclassification of documents from group H04W 36/00. Groups H04W 36/03 and H04W 36/00 should be considered in order to perform a complete search.
N	H04W 36/0005		Group H04W 36/0005 is impacted by reclassification into groups H04W 36/0007 and H04W 36/0009. All groups listed in this Warning should be considered in order to perform a complete search.
N	H04W 36/0007		Group H04W 36/0007 is incomplete pending reclassification of documents from group H04W 36/0005. Groups H04W 36/0005 and H04W 36/0007 should be considered in order to perform a complete search.
N	H04W 36/0009		Group H04W 36/0009 is incomplete pending reclassification of documents from group H04W 36/0005. Groups H04W 36/0005 and H04W 36/0009 should be considered in order to perform a complete search.
N	H04W 36/0055		Group H04W 36/0055 is impacted by reclassification into groups H04W 36/0058, H04W 36/0069 and H04W 36/0079. All groups listed in this Warning should be considered in order to perform a complete search.
N	H04W 36/0058		Group H04W 36/0058 is incomplete pending reclassification of documents from group H04W 36/0055. Groups H04W 36/0055 and H04W 36/0058 should be considered in order to perform a complete search.
N	H04W 36/0069		Group H04W 36/0069 is incomplete pending reclassification of documents from group H04W 36/0055. Groups H04W 36/0055 and H04W 36/0069 should be considered in order to perform a complete search.
N	H04W 36/0079		Group H04W 36/0079 is incomplete pending reclassification of documents from groups H04W 36/0055 and H04W 36/30. Groups H04W 36/0055, H04W 36/30 and H04W 36/0079 should be considered in order to perform a complete search.

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<u>Type*</u>	<u>Location</u>	<u>Old Warning notice</u>	<u>New/Modified Warning notice</u>
N	H04W 36/0083		Group H04W 36/0083 is impacted by reclassification into groups H04W 36/00835, H04W 36/00837, and H04W 36/0085. All groups listed in this Warning should be considered in order to perform a complete search.
N	H04W 36/00835		Group H04W 36/00835 is incomplete pending reclassification of documents from group H04W 36/0083. Groups H04W 36/0083 and H04W 36/00835 should be considered in order to perform a complete search.
N	H04W 36/00837		Group H04W 36/00837 is incomplete pending reclassification of documents from group H04W 36/0083. Groups H04W 36/0083 and H04W 36/00837 should be considered in order to perform a complete search.
N	H04W 36/0085		Group H04W 36/0085 is incomplete pending reclassification of documents from group H04W 36/0083. Groups H04W 36/0083 and H04W 36/0085 should be considered in order to perform a complete search.
N	H04W 36/12		Group H04W 36/12 is impacted by reclassification into group H04W 36/125. Groups H04W 36/12 and H04W 36/125 should be considered in order to perform a complete search.
N	H04W 36/125		Group H04W 36/125 is incomplete pending reclassification of documents from group H04W 36/12. Groups H04W 36/12 and H04W 36/125 should be considered in order to perform a complete search.
N	H04W 36/30		Group H04W 36/30 is impacted by reclassification into groups H04W 36/305 and H04W 36/0079. Groups H04W 36/30, H04W 36/305 and H04W 36/0079 should be considered in order to perform a complete search.
N	H04W 36/305		Group H04W 36/305 is incomplete pending reclassification of documents from group H04W 36/30. Groups H04W 36/30 and H04W 36/305 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.

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2. A. DEFINITIONS (NEW)

Insert: The following new definitions.

H04W 36/03

Definition statement

This place covers:

Hand-off of a pre-established connection through an access point to a direct mode connection; Hand-off of a direct mode connection; wherein the direct mode connection is established in a pre-organized network or is established independently, e.g. ad hoc.

H04W 36/0007

Definition statement

This place covers:

Transmission and use of control information, e.g. hand-off signalling messages, including trigger messages which initiates connection(s) hand-off of MBMS services provided in the cell.

References

Limiting references

This place does not cover:

Selective distribution or broadcast services to user groups	H04W 4/06
Resource management for broadcast services	H04W 72/005
Connection management for selective distribution or broadcast	H04W 76/40

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H04W 36/0009

Definition statement

This place covers:

Transmission and use of control information, e.g. hand-off signalling messages, including trigger messages which initiates connection(s) hand-off of group communication(s), e.g. for moving wireless networks, hand-off of a group of terminals

References

Limiting references

This place does not cover:

User group management	H04W 4/08
Processing of subscriber group data	H04W 8/186

H04W 36/0058

Definition statement

This place covers:

Transmission and use of control information, e.g. hand-off signalling messages, including trigger messages which initiates connection(s) hand-off of MBMS services provided in the cell.

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H04W 36/0069

Definition statement

This place covers:

Transmission and use of information for hand-off of radio link(s) in case of RRC diversity, decoupled uplink/downlink, aggregation of macro anchor carrier and low power node data booster, CoMP, carrier aggregation, unbalanced uplink/downlink.

References

Limiting references

This place does not cover:

Allocation of physical resources in a cooperative multipoint environment	H04L 5/0035
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H04W 36/0079

Definition statement

This place covers:

Transmission and use of information for retry strategies in case of hand-off failure or rejection.

H04W 36/0085

Definition statement

This place covers:

Scanning for hand-off; determination of the time at which measurement shall be performed; arrangements and techniques for defining and determining parameters required for hand-off measurements, determination of thresholds for triggering hand-off measurements.

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H04W 36/125

Definition statement

This place covers:

Reselecting a different type of service backbone for heterogeneous networks, e.g. between macro and femto cells; Reselecting a service backbone involving a service backbone bypassing mobility servers e.g. for local breakout in LIPA or for selected IP traffic offload SIPTO.

References

Informative references

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

Reselecting a cell layer in multi-layer cells providing the same type of service backbone	H04W 36/04
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H04W 36/305

Definition statement

This place covers:

Triggering the reselection if failure of the current radio link.

References

Limiting references

This place does not cover:

Control signalling for hand-off failure or rejection	H04W 36/0079
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H04W 36/00835

Definition statement

This place covers:

Generation or update of neighbour cell lists; determination of target BS priorities in the neighbour cell lists; determination of a target neighbour cell.

H04W 36/00837

Definition statement

This place covers:

Determination of thresholds values or any other type of values for which hand-off is triggered, determination of time when hand-off is triggered.

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3. A. DEFINITIONS (Modified)

Modify: The existing definitions as shown below.

H04W 36/04

Insert: The following new *Informative references* section.

References

Informative references

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

Reselecting a different type of service backbone for heterogeneous networks	H04W 36/125
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H04W 36/0061

Definition statement

Add: The following text to the end of the existing Definition statement.

or service capabilities.

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3. REVISION CONCORDANCE LIST (RCL)

Type*	From CPC Symbol (existing)	To CPC Symbol(s)
C	H04W 36/00	H04W 36/00, H04W 36/03
C	H04W 36/0005	H04W 36/0005, H04W 36/0007, H04W 36/0009
C	H04W 36/0055	H04W 36/0055, H04W 36/0058, H04W 36/0069, H04W 36/0079
C	H04W 36/0083	H04W 36/0083, H04W 36/00835, H04W 36/00837, H04W 36/0085
C	H04W 36/12	H04W 36/12, H04W 36/125
C	H04W 36/30	H04W 36/30, H04W 36/305, H04W 36/0079

* 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.

NOTES:

- Only C, D, and Q type entries are included in the table above.
- When multiple symbols are included in the “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>” or “<administrative transfer to XX and YY simultaneously>” when administrative transfer of the same documents is to more than one place.
- Administrative transfer to main trunk groups is assumed to be “invention information”, unless otherwise indicated, and to 2000 series groups is assumed to be “additional information”.

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

<u>CPC</u>	<u>IPC</u>	<u>Action*</u>
H04W 36/0007	H04W 36/00	NEW
H04W 36/0009	H04W 36/00	NEW
H04W 36/0058	H04W 36/00	NEW
H04W 36/0069	H04W 36/00	NEW
H04W 36/0079	H04W 36/00	NEW
H04W 36/00835	H04W 36/00	NEW
H04W 36/00837	H04W 36/00	NEW
H04W 36/0085	H04W 36/00	NEW
H04W 36/03	H04W 36/00	NEW
H04W 36/125	H04W 36/12	NEW
H04W 36/305	H04W 36/30	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.
- E and M symbols are not included in the CICL table above unless a change to the existing IPC is desired.