EUROPEAN PATENT OFFICE U.S. PATENT AND TRADEMARK OFFICE

CPC NOTICE OF CHANGES 1428

DATE: MAY1, 2023

PROJECT RP11668

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

Action	<u>Subclass</u>	Group(s)
CCITEME.		
SCHEME:		
Symbols Deleted:	H04W	36/245
Symbols New:	H04W	36/0019, 36/00222, 36/00224, 36/00226, 36/0064, 36/00692, 36/00695, 36/00698, 36/00725, 36/00833, 36/008355, 36/008357, 36/008375, 36/00838, 36/0235, 36/033, 36/035, 36/037, 36/083, 36/085, 36/087, 36/13, 36/142, 36/144, 36/1443, 36/1446, 36/185, 36/247, 36/249, 36/302, 36/304, 36/322, 36/324, 36/326, 36/328, 36/362
Titles Changed:	H04W	36/0011, 36/0016, 36/0022, 36/0027, 36/0055, 36/0061, 36/0069, 36/00835, 36/125, 36/165, 36/24, 36/28, 36/305
Warnings New:	H04W	36/0011, 36/0019, 36/0022, 36/00222, 36/00224, 36/0055, 36/0064, 36/0069, 36/00692, 36/00695, 36/00698, 36/0072, 36/00725, 36/0083, 36/00833, 36/00835, 36/008355, 36/008357, 36/00837, 36/008375, 36/00838, 36/023, 36/0235, 36/03, 36/033, 36/035, 36/037, 36/08, 36/083, 36/085, 36/087, 36/125, 36/13, 36/14, 36/142, 36/144, 36/165, 36/18, 36/185, 36/24, 36/247, 36/249, 36/28, 36/30, 36/302, 36/304, 36/32, 36/322, 36/324, 36/326, 36/328, 36/36, 36/362
DEFINITIONS:		
Definitions Deleted:	H04W	36/245
Definitions New:	H04W	36/0019, 36/00222, 36/00224, 36/00226, 36/0064, 36/00692, 36/00695, 36/00698, 36/00725, 36/00833, 36/008375, 36/00838, 36/033, 36/035, 36/037, 36/083, 36/085, 36/087, 36/13, 36/142, 36/144, 36/1443, 36/1446, 36/185, 36/247, 36/249, 36/302, 36/304, 36/36, 36/362
Definitions Modified:	H04W	36/00, 36/0009, 36/0011, 36/0016, 36/0022, 36/0027, 36/0058, 36/0061, 36/0069, 36/0079, 36/00835, 36/00837, 36/0085, 36/02, 36/125, 36/14, 36/16, 36/165, 36/18, 36/22, 36/305

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

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

1. CLA	SSIF	ICATION SCHEME CHANGES
	\boxtimes	A. New, Modified or Deleted Group(s)
	\boxtimes	B. New, Modified or Deleted Warning(s)
		C. New, Modified or Deleted Note(s)
		D. New, Modified or Deleted Guidance Heading(s)
2. DEFI	NITI	ONS
	\boxtimes	$A.\ New\ or\ Modified\ Definitions\ (Full\ definition\ template)$
	\boxtimes	B. Modified or Deleted Definitions (Definitions Quick Fix)

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- 3. X REVISION CONCORDANCE LIST (RCL)
- 4. A 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)

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

<u>Type</u> *	Symbol	<u>Indent</u>	<u>Title</u>	<u>Transferred to[#]</u>
		<u>Level</u> <u>Number</u>	"CPC only" text should normally be enclosed in {curly brackets}**	
		of dots	encrosed in fearing of ackets?	
		(e.g. 0, 1,		
		<u>2)</u>		
U	H04W 36/0005	1	{Control or signalling for completing the hand-off}	
С	H04W 36/0011	2	{for data sessions of end-to-end connection}	H04W 36/0011, H04W 36/0019
M	H04W 36/0016	3	{Hand-off preparation specially adapted for end-to-end data sessions}	
N	H04W 36/0019	3	{adapted for mobile IP [MIP]}	
С	H04W 36/0022	3	{for transferring data sessions between	H04W 36/0022,
			adjacent core network technologies }	H04W 36/00222, H04W 36/00224, H04W 36/00226
N	H04W 36/00222	4	{between different packet switched [PS]	
			network technologies, e.g. transferring data sessions between LTE and WLAN or LTE and 5G}	
N	H04W 36/00224	4	{between packet switched [PS] and circuit	
			s witched [CS] network technologies, e.g. circuit s witched fallback [CSFB]}	
N	H04W 36/00226	5	{wherein the core network technologies comprise IP multimedia system [IMS], e.g. single radio voice call continuity [SRVCC]}	
M	H04W 36/0027	3	{for a plurality of data sessions of end-to- end connections, e.g. multi-call or multi- bearer end-to-end data connections}	
С	H04W36/0055	2	{Transmission or use of information for re- establishing the radio link}	H04W 36/0055, H04W 36/0064, H04W 36/13
M	H04W 36/0061	3	{of neighbour cell information}	
N	H04W 36/0064	3	{of control information between different access points}	
С	H04W 36/0069	3	{in case of dual connectivity, e.g. decoupled uplink/downlink}	H04W 36/0069, H04W 36/00692, H04W 36/00695, H04W 36/00698
N	H04W 36/00692	4	{using simultaneous multiple data streams, e.g. cooperative multipoint [CoMP], carrier aggregation [CA] or multiple input multiple	

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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}**	<u>Transferred to#</u>
			output [MIMO] (allocation of physical resources in CoMP or in CA H04L 5/0035)}	
N	H04W 36/00695	4	{using split of the control plane or user plane}	
N	H04W 36/00698	4	{using different RATs}	
С	H04W 36/0072	3	{of resource information of target access point}	H04W 36/0072, H04W 36/00725, H04W 36/249
N	H04W 36/00725	4	{Randomaccess channel [RACH]-less handover}	
С	H04W 36/0083	2	{Determination of parameters used for hand- off, e.g. generation or modification of neighbour cell lists }	H04W 36/0083, H04W 36/00833, H04W 36/00838
N	H04W 36/00833	3	{Handover statistics}	
С	H04W 36/00835	3	{Determination of neighbour cell lists}	H04W 36/00835, H04W 36/008355, H04W 36/008357, H04W 36/00838
N	H04W 36/008355	4	{Determination of target cell based on user equipment [UE] properties, e.g. UE service capabilities}	
N	H04W 36/008357	4	{Determination of target cell based on access point [AP] properties, e.g. AP service capabilities}	
С	H04W 36/00837	3	{Determination of triggering parameters for hand-off}	H04W 36/00837, H04W 36/008375, H04W 36/00838
N	H04W 36/008375	4	{based on historical data}	
N	H04W 36/00838	3	{Resource reservation for handover}	
С	H04W 36/023	2	{Buffering or recovering information during reselection}	H04W 36/023, H04W 36/0235
N	H04W 36/0235	3	{by transmitting sequence numbers, e.g. SN status transfer}	
С	H04W 36/03	1	{Reselecting a link using a direct mode connection}	H04W 36/03, H04W 36/033, H04W 36/035, H04W 36/037
N	H04W 36/033	2	{in pre-organised networks}	
N	H04W 36/035	2	{in self-organising networks}	
N C	H04W 36/037 H04W 36/08	2	{by reducing handover delay, e.g. latency} Reselecting an access point	H04W 36/08,
				H04W 36/083, H04W 36/085, H04W 36/087, H04W 36/13
N	H04W 36/083	2	{wherein at least one of the access points is a moving node}	

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Type*	<u>Symbol</u>	Indent	<u>Title</u>	Transferred to#
		<u>Level</u>	"CPC only" text should normally be enclosed in {curly brackets}**	
		Number of dots	enclosed in {curly brackets}	
		(e.g. 0, 1,		
		2)		
N	H04W 36/085	2	{involving beams of access points}	
N	H04W 36/087	2	{between radio units of access points}	
С	H04W 36/125	2	{involving different types of service	H04W 36/125,
			backbones}	H04W 36/13
N	H04W 36/13	1	{Cell handover without a predetermined	
С	H04W 36/14	1	boundary, e.g. virtual cells } Reselecting a network or an air interface	H04W 36/14, H04W
	104W 30/14	1	Reselecting a network of an an interface	36/142, H04W
				36/144,
				H04W 36/1443,
				H04W 36/1446,
				H04W 36/13
N	H04W 36/142	2	{over the same radio air interface	
N.T.	110433/ 26/144	2	technology } {over a different radio air interface	
N	H04W 36/144	2	technology }	
N	H04W 36/1443	3	{between licensed networks}	
N	H04W 36/1446	3	{wherein at least one of the networks is	
			unlicensed}	
С	H04W 36/165	2	{for reducing network power consumption	H04W 36/165,
			(H04W 36/18 - H04W 36/22 take	H04W 36/247
	110 AVI 0 6/10		precedence)}	110 1111 2 6 11 0
С	H04W 36/18	2	for allowing seamless reselection, e.g. soft reselection	H04W 36/18, H04W 36/185,
			leselection	H04W 36/0069,
				H04W 36/00692,
				H04W 36/00695,
				H04W 36/00698
N	H04W 36/185	3	{using make before break}	
С	H04W 36/24	1	Reselection being triggered by specific	H04W 36/24,
			parameters	H04W 36/247, H04W 36/249
D	H04W 36/245	2	{by historical data}	<administrative< td=""></administrative<>
۵ ا	110411 30/243		Toy historicardata;	transfer to H04W
				36/008375>
N	H04W 36/247	2	{by using coverage extension}	
N	H04W 36/249	2	{according to timing information}	
U	H04W 36/26	2	by agreed or negotiated communication	
~	110 (111 0 5/20	2	parameters	110 1111 0 < 100
С	H04W 36/28	3	involving a plurality of connections, e.g. multi-call or multi-bearer connections	H04W 36/28, H04W 36/0069,
			muni-can of muni-beater connections	H04W 36/0069, H04W 36/00692,
				H04W 36/00692, H04W 36/00695,
				H04W 36/00698
С	H04W 36/30	2	by measured or perceived connection quality	H04W 36/30,
			data	H04W 36/302,
				H04W 36/304

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Type*	<u>Symbol</u>	<u>Indent</u>	<u>Title</u>	<u>Transferred to[#]</u>
		<u>Level</u>	"CPC only" text should normally be	
		<u>Number</u>	enclosedin {curly brackets}**	
		<u>of dots</u>		
		(e.g. 0, 1,		
		<u>2)</u>		
N	H04W 36/302	3	{due to low signal strength}	
N	H04W 36/304	3	{due to measured or perceived resources	
			with higher communication quality }	
M	H04W 36/305	3	{Handover due to radio link failure (control	
			signalling for hand-off failure H04W	
			36/0079)}	
С	H04W 36/32	2	by location or mobility data, e.g. speed data	H04W 36/32,
				H04W 36/322,
				H04W 36/324,
				H04W 36/326,
				H04W 36/328
N	H04W 36/322	3	{by location data}	
N	H04W 36/324	3	{by mobility data, e.g. speed data}	
N	H04W 36/326	3	{by proximity to another entity}	
N	H04W 36/328	3	{by altitude}	
С	H04W 36/36	2	by user or terminal equipment	H04W 36/36,
				H04W 36/362
N	H04W 36/362	3	{Conditional handover}	

*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.

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- 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.

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B. New, Modified or Deleted Warning(s)

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

<u>Type</u> *	<u>Location</u>	Old Warning	New/Modified Warning
N	H04W 36/0011		Group H04W 36/0011 is impacted by reclassification into group H04W 36/0019. Groups H04W 36/0011 and H04W 36/0019 should be considered in order to perform a complete search.
N	H04W 36/0019		Group H04W 36/0019 is incomplete pending reclassification of documents from group H04W 36/0011. Groups H04W 36/0011 and H04W 36/0019 should be considered in order to perform a complete search.
N	H04W 36/0022		Group H04W 36/0022 is impacted by reclassification into groups H04W 36/00222, H04W 36/00224 and H04W 36/00226. All groups listed in this Warning should be considered in order to perform a complete search.
N	H04W 36/00222		Group H04W 36/00222 is incomplete pending reclassification of documents from group H04W 36/0022. Groups H04W 36/0022 and H04W 36/00222 should be considered in order to performa complete search.
N	H04W 36/00224		Groups H04W 36/00224 and H04W 36/00226 are incomplete pending reclassification of documents from group H04W 36/0022. Groups H04W 36/0022, H04W 36/00224 and H04W 36/00226 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 36/0064 and H04W 36/13. Groups H04W 36/0055, H04W 36/0064 and H04W 36/13 should be considered in order to perform a complete search.
N	H04W 36/0064		Group H04W 36/0064 is incomplete pending reclassification of documents from group H04W 36/0055. Groups H04W 36/0055 and H04W 36/0064 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 groups H04W 36/18 and H04W 36/28. Group H04W 36/0069 is also impacted by reclassification into groups H04W 36/00692, H04W 36/00695 and H04W 36/00698. All groups listed in this Warning should be considered in order to performa complete search.
N	H04W 36/00692		Group H04W 36/00692 is incomplete pending reclassification of documents from groups H04W 36/0069, H04W 36/18 and H04W 36/28. All groups listed in this Warning should be considered in order to perform a complete search.
N	H04W 36/00695		Group H04W 36/00695 is incomplete pending reclassification of documents from groups H04W 36/0069, H04W 36/18 and H04W 36/28. All groups listed in this Warning should be considered in order to perform a complete search.
N	H04W 36/00698		Group H04W 36/00698 is incomplete pending reclassification of documents from groups H04W 36/0069, H04W 36/18 and H04W 36/28. All groups listed in this Warning should be considered in order to perform a complete search.

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<u>Type</u> *	<u>Location</u>	Old Warning	New/Modified Warning
N	H04W 36/0072		Group H04W 36/0072 is impacted by reclassification into groups H04W 36/00725 and H04W 36/249. Groups H04W 36/0072, H04W 36/00725 and H04W 36/249 should be considered in order to perform a complete search.
N	H04W 36/00725		Group H04W 36/00725 is incomplete pending reclassification of documents from group H04W 36/0072. Groups H04W 36/0072 and H04W 36/00725 should be considered in order to perform a complete search.
N	H04W 36/0083		Group H04W 36/0083 is impacted by reclassification into groups H04W 36/00833 and H04W 36/00838. Groups H04W 36/0083, H04W 36/00833 and H04W 36/00838 should be considered in order to perform a complete search.
N	H04W 36/00833		Group H04W 36/00833 is incomplete pending reclassification of documents from group H04W 36/0083. Groups H04W 36/0083 and H04W 36/00833 should be considered in order to perform a complete search.
N	H04W 36/00835		Group H04W 36/00835 is impacted by reclassification into groups H04W 36/008355, H04W 36/008357 and H04W 36/00838. All groups listed in this Warning should be considered in order to perform a complete search.
N	H04W 36/008355		Group H04W 36/008355 is incomplete pending reclassification of documents from group H04W 36/00835. Groups H04W 36/00835 and H04W 36/008355 should be considered in order to perform a complete search.
N	H04W 36/008357		Group H04W 36/008357 is incomplete pending reclassification of documents from group H04W 36/00835. Groups H04W 36/00835 and H04W 36/008357 should be considered in order to perform a complete search.
N	H04W 36/00837		Group H04W 36/00837 is impacted by reclassification into groups H04W 36/008375 and H04W 36/00838. Groups H04W 36/00837, H04W 36/008375 and H04W 36/00838 should be considered in order to perform a complete search.
N	H04W 36/008375		Group H04W 36/008375 is incomplete pending reclassification of documents from group H04W 36/00837. Groups H04W 36/00837 and H04W 36/008375 should be considered in order to performa complete search.
N	H04W 36/00838		Group H04W 36/00838 is incomplete pending reclassification of documents from groups H04W 36/0083, H04W 36/00835 and H04W 36/00837. All groups listed in this Warning should be considered in order to perform a complete search.
N	H04W 36/023		Group H04W 36/023 is impacted by reclassification into group H04W 36/0235. Groups H04W 36/023 and H04W 36/0235 should be considered in order to perform a complete search.
N	H04W 36/0235		Group H04W 36/0235 is incomplete pending reclassification of documents from group H04W 36/023. Groups H04W 36/023 and H04W 36/0235 should be considered in order to performa complete search.
N	H04W 36/03		Group H04W 36/03 is impacted by reclassification into groups H04W 36/033, H04W 36/035 and H04W 36/037. All groups listed in this Warning should be considered in order to performa complete search.

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<u>Type</u> *	Location	Old Warning	New/Modified Warning
N	H04W 36/033	· · · · · · · · · · · · · · · · · · ·	Group H04W 36/033 is incomplete pending reclassification of documents from group H04W 36/03. Groups H04W 36/03 and H04W 36/033 should be considered in order to perform a complete
N	H04W 36/035		search. Group H04W 36/035 is incomplete pending reclassification of documents from group H04W 36/03. Groups H04W 36/03 and H04W 36/035 should be considered in order to perform a complete
N	H04W 36/037		search. Group H04W 36/037 is incomplete pending reclassification of documents from group H04W 36/03. Groups H04W 36/03 and H04W 36/037 should be considered in order to perform a complete
N	H04W 36/08		search. Group H04W 36/08 is impacted by reclassification into groups H04W 36/083, H04W 36/085, H04W 36/087 and H04W 36/13. All groups listed in this Warning should be considered in order to perform a complete search.
N	H04W 36/083		Group H04W 36/083 is incomplete pending reclassification of documents from group H04W 36/08. Groups H04W 36/08 and H04W 36/083 should be considered in order to perform a complete search.
N	H04W 36/085		Group H04W 36/085 is incomplete pending reclassification of documents from group H04W 36/08. Groups H04W 36/08 and H04W 36/085 should be considered in order to perform a complete search.
N	H04W 36/087		Group H04W 36/087 is incomplete pending reclassification of documents from group H04W 36/08. Groups H04W 36/08 and H04W 36/087 should be considered in order to perform a complete search.
N	H04W 36/125		Group H04W 36/125 is impacted by reclassification into group H04W 36/13. Groups H04W 36/125 and H04W 36/13 should be considered in order to perform a complete search.
N	H04W 36/13		Group H04W 36/13 is incomplete pending reclassification of documents from groups H04W 36/0055, H04W 36/08, H04W 36/125 and H04W 36/14. All groups listed in this Warning should be considered in order to perform a complete search.
N	H04W 36/14		Group H04W 36/14 is impacted by reclassification into groups H04W 36/142, H04W 36/144, H04W 36/1443, H04W 36/1446 and H04W 36/13. All groups listed in this Warning should be considered in order to perform a complete search.
N	H04W 36/142		Group H04W 36/142 is incomplete pending reclassification of documents from group H04W 36/14. Groups H04W 36/14 and H04W 36/142 should be considered in order to perform a complete search.
N	H04W 36/144		Groups H04W 36/144, H04W 36/1443 and H04W 36/1446 are incomplete pending reclassification of documents from group H04W 36/14. All groups listed in this Warning should be considered in order to perform a complete search.
N	H04W 36/165		Group H04W 36/165 is impacted by reclassification into group H04W 36/247. Groups H04W 36/165 and H04W 36/247 should be considered in order to perform a complete search.

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Type*	Location	Old Warning	New/Modified Warning
N	H04W 36/18		Group H04W 36/18 is impacted by reclassification into groups H04W 36/185, H04W 36/0069, H04W 36/00692, H04W 36/00695 and H04W 36/00698. All groups listed in this Warning should be considered in order to perform a complete search.
N	H04W 36/185		Group H04W 36/185 is incomplete pending reclassification of documents from group H04W 36/18. Groups H04W 36/18 and H04W 36/185 should be considered in order to perform a complete search.
N	H04W 36/24		Group H04W 36/24 is impacted by reclassification into groups H04W 36/247 and H04W 36/249. Groups H04W 36/24, H04W 36/247 and H04W 36/249 should be considered in order to perform a complete search.
N	H04W 36/247		Group H04W 36/247 is incomplete pending reclassification of documents from groups H04W 36/165 and H04W 36/24. Groups H04W 36/165, H04W 36/24 and H04W 36/247 should be considered in order to perform a complete search.
N	H04W 36/249		Group H04W 36/249 is incomplete pending reclassification of documents from groups H04W 36/0072 and H04W 36/24. Groups H04W 36/0072, H04W 36/24 and H04W 36/249 should be considered in order to perform a complete search.
N	H04W 36/28		Group H04W 36/28 is impacted by reclassification into groups H04W 36/0069, H04W 36/00692, H04W 36/00695 and H04W 36/00698. All groups listed in this Warning 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 36/302 and H04W 36/304. Groups H04W 36/30, H04W 36/302 and H04W 36/304 should be considered in order to perform a complete search.
N	H04W 36/302		Group H04W 36/302 is incomplete pending reclassification of documents from group H04W 36/30. Groups H04W 36/30 and H04W 36/302 should be considered in order to perform a complete search.
N	H04W 36/304		Group H04W 36/304 is incomplete pending reclassification of documents from group H04W 36/30. Groups H04W 36/30 and H04W 36/304 should be considered in order to perform a complete search.
N	H04W 36/32		Group H04W 36/32 is impacted by reclassification into groups H04W 36/322, H04W 36/324, H04W 36/326 and H04W 36/328. All groups listed in this Warning should be considered in order to perform a complete search.
N	H04W 36/322		Group H04W 36/322 is incomplete pending reclassification of documents from group H04W 36/32. Groups H04W 36/32 and H04W 36/322 should be considered in order to perform a complete search.
N	H04W 36/324		Group H04W 36/324 is incomplete pending reclassification of documents from group H04W 36/32. Groups H04W 36/32 and H04W 36/324 should be considered in order to perform a complete search.
N	H04W 36/326		Group H04W 36/326 is incomplete pending reclassification of documents from group H04W 36/32. Groups H04W 36/32 and

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Type*	<u>Location</u>	Old Warning	New/Modified Warning
			H04W 36/326 should be considered in order to perform a complete search.
N	H04W 36/328		Group H04W 36/328 is incomplete pending reclassification of documents from group H04W 36/32. Groups H04W 36/32 and H04W 36/328 should be considered in order to perform a complete search.
N	H04W 36/36		Group H04W 36/36 is impacted by reclassification into group H04W 36/362. Groups H04W 36/36 and H04W 36/362 should be considered in order to perform a complete search.
N	H04W 36/362		Group H04W 36/362 is incomplete pending reclassification of documents from group H04W 36/36. Groups H04W 36/36 and H04W 36/362 should be considered in order to perform a complete search.

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2. A. DEFINITIONS (new)

Insert: The following new Definitions.

H04W 36/0019

Definition statement

This place covers:

Handover signalling adapted for mobile IP.

H04W 36/00222

Definition statement

This place covers:

Facilitating access network mobility of data sessions through handovers between at least two adjacent core network domains belonging to different packet switched network technologies, e.g. between LTE and WLAN or LTE and 5G.

H04W 36/00224

Definition statement

This place covers:

Facilitating access network mobility of data sessions through handovers between at least two adjacent core network domains belonging to one packet switched network technology and one circuit switched network technology, e.g. CSFB.

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H04W 36/00226

Definition statement

This place covers:

Facilitating access network mobility of data sessions through handovers between at least two adjacent core network domains belonging to one packet switched network technology and one circuit switched network technology, wherein at least one core network domain comprises IP multimedia core network subsystem [IMS], e.g. SRVCC.

H04W 36/0064

Definition statement

This place covers:

Direct transfer of handover control information between different access points, e.g. between source and target access point.

H04W 36/00692

Definition statement

This place covers:

Handover involving connections transmitting multiple data streams in parallel, e.g. using cooperative multipoint environment [CoMP], carrier aggregation [CA] or using multiple transmitting/receiving antennas [MIMO].

H04W 36/00695

Definition statement

This place covers:

Handover of only one of the control plane or user plane connections in environments using multiple user plane connections.

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H04W 36/00698

Definition statement

This place covers:

Handover in case of dual connection using different radio access technologies, e.g. licensed/unlicensed or LTE/5G.

H04W 36/00725

Definition statement

This place covers:

Execution of handoff without execution of a RACH procedure when accessing the target cell.

H04W 36/00833

Definition statement

This place covers:

Determination of handover statistics used for improving network performance, e.g. HO failure rate or HO counts.

H04W 36/008375

Definition statement

This place covers:

The hand-off criteria are derived/calculated from recorded network data. Preventing hand-off to target cells for which a short dwell time is expected.

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H04W 36/00838

Definition statement

This place covers:

Handover resource prioritization, handover pre-emption or disabling handover.

H04W 36/033

Definition statement

This place covers:

Handover of a pre-established connection through an access point to a direct mode connection or handover of direct mode connection from one cell to another.

H04W 36/035

Definition statement

This place covers:

Handover of connection involving link(s) of self-organizing networks, e.g. for ad-hoc networks, Bluetooth or sensor networks.

H04W 36/037

Definition statement

This place covers:

Handover latency improvement for direct mode connections, e.g. for vehicle communication, vehicle-to-vehicle [V2V], vehicle-to-everything [V2X], vehicle-to-pedestrian [V2P] or vehicle-to-home [V2H].

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Informative references

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

Services adapted for vehicle communication	H04W 4/40
Services adapted for verticle confinitionication	1104VV 4/4U

H04W 36/083

Definition statement

This place covers:

Arrangements where at least one of the access points involved in handoff/handover is a moving node, e.g. moving repeater(s), drone(s), unmanned aerial vehicle(s) [UAV], satellite(s) or airplane(s).

References

Informative references

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

|--|

H04W 36/085

Definition statement

This place covers:

Arrangements where during the handover a different beam of a different access point is selected.

References

Informative references

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

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Cell structures using beam steering	H04W 16/28
Diversity systems	H04B 7/02

H04W 36/087

Definition statement

This place covers:

Specific units of the access point(s) are involved in the handover, e.g. distribution unit(s) (inter-gNB-DU handover) or remote components (e.g. remote radio heads/units or RRH/RRU).

Informative references

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

Access points with remote components connected to the	H04W 88/085
main body by cable, e.g. through CPRI interface	

H04W 36/13

Definition statement

This place covers:

Arrangements where at least one of the cells involved in handover are without a predetermined boundary, e.g. for virtual cells, cloud base station(s), network slice(s) or interzone handover (between group of cells).

H04W 36/142

Definition statement

This place covers:

The connection is transferred to a different network or authority using the same radio air interface technology, e.g. inter-operator.

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H04W 36/144

Definition statement

This place covers:

The connection is transferred between different radio air interface technologies.

H04W 36/1443

Definition statement

This place covers:

The connection is transferred between licensed networks, e.g. UMTS-LTE or LTE-5G.

H04W 36/1446

Definition statement

This place covers:

The connection is transferred between networks comprising at least one unlicensed network, e.g. LTE-WLAN.

H04W 36/185

Definition statement

This place covers:

Maintaining the link with the source node until the connection with the target cell is established, e.g. make before break.

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H04W 36/247

Definition statement

This place covers:

Handover being triggered by using cell range extension.

H04W 36/249

Definition statement

This place covers:

Handover being triggered based on timing information, e.g. at a specific time or after a specific time period.

H04W 36/302

Definition statement

This place covers:

Handoff/handover being triggered by perceived low signal strength.

H04W 36/304

Definition statement

This place covers:

Handoff/handover being triggered based on perceiving resources with higher communication quality, e.g. higher data rate or higher throughput.

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H04W 36/36

Definition statement

This place covers:

Comprises UE-centric handover.

H04W 36/362

Definition statement

This place covers:

Handover performed by the terminal when triggering condition sent by the network is fulfilled, e.g. based on stored configurations.

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2. A. DEFINITIONS (modified)

H04W 36/00

Definition statement

<u>Replace</u>: In the last paragraph of the Definition statement, the term "equipments" with "equipment".

<u>Insert</u>: A period at the end of the Definition statement.

Generation, update or management of Neighbour Cell Lists; temporary storage, buffering of connection data during reselection, performing registration, binding or location updates at reselection of network equipment or administrative domains.

References

Replace: The existing Informative references table with the following updated table.

Informative references

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

Supervisory, monitoring or testing arrangements	H04W 24/00
Connection management	H04W 76/00
"Idle hand-off", i.e. reselection while user terminal is in an	H04W 48/18,
idle, non-connected state	H04W 48/20
Transmission Power Control during macro-diversity or soft	H04W 52/40
handoff	
Registration, e.g. affiliation to network; De-registration, e.g.	H04W 60/00
terminating affiliation	
Resource management for broadcast services	H04W 72/30
Arrangements for detecting or preventing errors in the	H04L 1/00
information received	

Delete: The entire Special rules of classification section.

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Insert: The following new Glossary of terms section.

Glossary of terms

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

hand-off	means a change of a radio link while a connection is ongoing (active state) or readily set up although no data are currently transmitted (dormant state)
user mobility	means the user changing his point(s) of attachment in the network(s), e.g. access point due to movement in service areas
registration	means using system, user or terminal tracking information to detect user mobility
seamless	means a reselection whereby wireless links are temporarily added or deleted in such a manner that the terminal keeps at least one link connected
lossless reselection	means a reselection whereby information loss during reselection is prevented or avoided

Insert: The following new Synonyms and Keywords section.

Synonyms and Keywords

In patent documents, the following words/expressions are often used as synonyms:

handover and hand-off

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H04W 36/0009

Definition statement

Replace: The existing Definition statement text with the following updated text.

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 or hand-off of a group of terminals.

References

Insert: The following new Informative references section.

Informative references

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

Network topology specific to moving wireless networks	H04W 84/005
Hand-off for a plurality of connections of one user	H04W 36/28

H04W 36/0011

Definition statement

Insert: A period at the end of the Definition statement.

Transmission and use of control information, e.g. hand-off signalling messages, including trigger messages which initiate data session or connection hand-off.

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References

<u>Replace</u>: The existing text and symbols in the Informative references table with the following updated text and symbols.

Informative references

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

Connection manipulation of transport tunnels	H04W 76/22
Real-time multimedia communications; Session management	H04L 65/1066

H04W 36/0016

Definition statement

Replace: The existing Definition statement text with the following updated text.

Preparing data session for end-to-end connection hand-off (e.g. by using binding update messages) carried out during or prior to lower layer hand-off events (e.g. radio link hand-off), e.g. for mobile IP, GPRS tunnelling protocol [GTP].

H04W 36/0022

Definition statement

Replace: The existing Definition statement text with the following updated text.

Facilitating access network mobility of data sessions through handovers between at least two core network domains, either in one or in both directions. Involves change from one core network technology, e.g. from packet switched [PS], to a different core network technology, to e.g. circuit switched [CS] domain or to CS fall-back in evolved packet system [EPS].

Used, e.g. in voice call continuity [VCC], single radio VCC [SRVCC] or voice over LTE generic access [VoLGA].

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H04W 36/0027

Definition statement

Replace: The existing Definition statement text with the following updated text.

Exchange of information for selecting a particular data session to be handed off.

H04W 36/0058

Definition statement

Replace: The existing Definition statement text with the following updated text.

Transmission of measurement information and their usage for re-establishing the radio link, e.g. handoff signalling messages.

References

Insert: The following new Informative references section.

Informative references

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

Hand-off measurements H04W 36/0085

H04W 36/0061

References

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

Informative references

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

Determination, gen	neration or modification of neigh	bour cell H04W 36/0083	35
list(s)	_		

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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

Delete: The entire Limiting references section.

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

Informative references

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

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

H04W 36/0079

References

Insert: The following new Informative references section.

Informative references

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

Management of connection set-up rejection and failure	H04W 76/18
I wanagement of combotion out up rejection and railare	110 111 10/10

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H04W 36/00835

Definition statement

Replace: The existing Definition statement text with the following updated text.

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

H04W 36/00837

Definition statement

Replace: The existing Definition statement text with the following updated text.

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

Determination of time when hand-off is triggered.

References

Insert: The following new Informative references section.

Informative references

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

Reselection being triggered by specific parameters H04W 36/24	Reselection being triggered by specific parameters	H04W 36/24
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H04W 36/0085

Definition statement

Replace: The existing Definition statement text with the following updated text.

Scanning for hand-off.

Determination of the time at which measurement shall be performed.

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Arrangements and techniques for defining and determining parameters required for hand-off measurements, e.g. determination of thresholds for triggering hand-off measurements.

References

Insert: The following new Informative references section.

Informative references

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

Minimisation of drive tests (MDT)	H04W 24/10
Measurements for self-organising networks (SON)	H04W 24/02

H04W 36/02

Definition statement

Replace: The existing Definition statement text with the following updated text.

Arrangements for avoiding loss of information transiting in the network during reselection of a, generally, new access point by temporary storage and subsequent delivery to the, generally, new selected access point. Resending or duplicating of data; temporary suspension of information flow. Sending the same data to several access points during handoff.

H04W 36/125

References

Insert: The following new reference in the Informative references table.

Informative references

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

Management of mobility data for LIPA	H04W 8/082
--------------------------------------	------------

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H04W 36/14

Definition statement

Replace: The existing Definition statement text with the following updated text.

The connection is transferred to a different network or authority, e.g. interoperator or inter-system hand-off.

References

Insert: The following new reference in the Informative references table.

Informative references

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

Transfer of connections of townsheds with would CIM	1104141 70/40
Transfer of connections of terminals with multi-SIM	H04W 76/19

H04W36/16

Definition statement

Replace: The existing Definition statement text with the following updated text.

Handing over connections in order to improve the overall network performance, not the performance of the connection itself.

H04W 36/165

Definition statement

Replace: The existing Definition statement text with the following updated text.

Hand-off of terminals for reducing overall network power consumption.

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References

Delete: The entire Informative references section.

Insert: The following new Limiting references section.

Limiting references

This place does not cover:

Performing selection for specific purposes	H04W36/18 -
	H04W36/22

<u>Delete</u>: The entire Special rules of classification section.

H04W 36/18

References

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

Insert: The following new Informative references section.

Informative references

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

Diversity systems, i.e. using permanently existing parallel connections for improving the robustness of the wireless connection	H04B 7/02
Diversity systems; Cooperative use of antennas of several nodes, e.g. in coordinated multipoint or cooperative MIMO	H04B 7/024

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H04W 36/22

References

Replace: The existing Informative references table with the following updated table.

Informative references

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

Load shedding arrangements	H04W 16/08
Load balancing or load distribution, transfer of traffic between already established connection	H04W 28/08
Handing over a connection due to low quality due to congestion	H04W 36/30

H04W 36/305

Definition statement

Replace: The existing Definition statement text with the following updated text.

Triggering the handover due to failure of the current radio link.

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2. B. DEFINITIONS QUICK FIX

Symbol	Location of change (e.g., section title)	Existing reference symbol or text	Action; New symbol; New text
H04W 36/245	Definition	Entire definition	DELETE entire definition

Notes:

Use this Definitions Quick Fix (DQF) table to:

- Delete an entire definition
- Delete an entire section
- Change a reference symbol
- Delete a reference symbol
- Delete text in a References section
- Correct one error in spelling, article use, or verb tense

Otherwise, use the standard template.

Reminder: Never delete F symbol definitions.

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3. REVISION CONCORDANCE LIST (RCL)

Type*	From CPC Symbol	To CPC Symbol(s)	
	(existing)		
С	H04W 36/0011	H04W 36/0011, H04W 36/0019	
С	H04W 36/0022	H04W 36/0022, H04W 36/00222, H04W 36/00224, H04W 36/00226	
С	H04W 36/0055	H04W 36/0055, H04W 36/0064, H04W 36/13	
С	H04W 36/0069	H04W 36/0069, H04W 36/00692, H04W 36/00695, H04W 36/00698	
С	H04W 36/0072	H04W 36/0072, H04W 36/00725, H04W 36/249	
С	H04W 36/0083	H04W 36/0083, H04W 36/00833, H04W 36/00838	
С	H04W 36/00835	H04W 36/00835, H04W 36/008355, H04W 36/008357,	
		H04W 36/00838	
С	H04W 36/00837	H04W 36/00837, H04W 36/008375, H04W 36/00838	
С	H04W 36/023	H04W 36/023, H04W 36/0235	
С	H04W 36/03	H04W 36/03, H04W 36/033, H04W 36/035, H04W 36/037	
С	H04W 36/08	H04W 36/08, H04W 36/083, H04W 36/085, H04W 36/087,	
		H04W 36/13	
С	H04W 36/125	H04W 36/125, H04W 36/13	
С	H04W 36/14	H04W 36/14, H04W 36/142, H04W 36/144, H04W 36/1443,	
		H04W 36/1446, H04W 36/13	
С	H04W 36/165	H04W 36/165, H04W 36/247	
С	H04W 36/18	H04W 36/18, H04W 36/185, H04W 36/0069, H04W 36/00692,	
		H04W 36/00695, H04W 36/00698	
C	H04W 36/24	H04W 36/24, H04W 36/247, H04W 36/249	
D	H04W 36/245	<administrative 008375="" 36="" h04w="" to="" transfer=""></administrative>	
С	H04W 36/28	H04W 36/28, H04W 36/0069, H04W 36/00692, H04W 36/00695,	
		H04W 36/00698	
С	H04W 36/30	H04W 36/30, H04W 36/302, H04W 36/304	
С	H04W 36/32	H04W 36/32, H04W 36/322, H04W 36/324, H04W 36/326,	
		H04W 36/328	
С	H04W 36/36	H04W 36/36, H04W 36/362	

^{*} 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	<u>IPC</u>	Action*
H04W 36/0019	H04W 36/00	NEW
H04W 36/00222	H04W 36/00	NEW
H04W 36/00224	H04W 36/00	NEW
H04W 36/00226	H04W 36/00	NEW
H04W 36/0064	H04W 36/00	NEW
H04W 36/00692	H04W 36/00	NEW
H04W 36/00695	H04W 36/00	NEW
H04W 36/00698	H04W 36/00	NEW
H04W 36/00725	H04W 36/00	NEW
H04W 36/00833	H04W 36/00	NEW
H04W 36/008355	H04W 36/00	NEW
H04W 36/008357	H04W 36/00	NEW
H04W 36/008375	H04W 36/00	NEW
H04W 36/00838	H04W 36/00	NEW
H04W 36/0235	H04W 36/02	NEW
H04W 36/033	H04W 36/00	NEW
H04W 36/035	H04W 36/00	NEW
H04W 36/037	H04W 36/00	NEW
H04W 36/083	H04W 36/08	NEW
H04W 36/085	H04W 36/08	NEW
H04W 36/087	H04W 36/08	NEW
H04W 36/13	H04W 36/00	NEW
H04W 36/142	H04W 36/14	NEW
H04W 36/144	H04W 36/14	NEW
H04W 36/1443	H04W 36/14	NEW
H04W 36/1446	H04W 36/14	NEW
H04W 36/185	H04W 36/18	NEW
H04W 36/245		DELETE
H04W 36/247	H04W 36/24	NEW
H04W 36/249	H04W 36/24	NEW
H04W 36/302	H04W 36/30	NEW
H04W 36/304	H04W 36/30	NEW
H04W 36/322	H04W 36/32	NEW
H04W 36/324	H04W 36/32	NEW
H04W 36/326	H04W 36/32	NEW
H04W 36/328	H04W 36/32	NEW
H04W 36/362	H04W 36/36	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.

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- 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 <u>not</u> 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 d