

EUROPEAN PATENT OFFICE
U.S. PATENT AND TRADEMARK OFFICE

CPC NOTICE OF CHANGES 1431

DATE: AUGUST 1, 2023

PROJECT RP11516

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:	H04J	14/02122, 14/02126, 14/02212, 14/02214, 14/02216, 14/02218, 14/02219, 14/02762, 14/02764, 14/02862, 14/03, 14/0305, 14/0307, 14/05, 14/052, 14/07
Titles Changed:	H04J	14/00, 2014/0253, 14/0267, 14/0268, 14/0269, 14/0272
Warnings New:	H04J	14/00, 14/02, 14/021, 14/0212, 14/02122, 14/02126, 14/0221, 14/02212, 14/02214, 14/02216, 14/02218, 14/02219, 14/0254, 14/02762, 14/02764, 14/0278, 14/02862, 14/03, 14/04, 14/05, 14/052, 14/07
DEFINITIONS:		
Definitions New:	H04J	14/02122, 14/02126, 14/02212, 14/02214, 14/02216, 14/02218, 14/02219, 2014/0253, 14/0267, 14/0268, 14/0269, 14/0272, 14/02762, 14/02764, 14/02862, 14/03, 14/0305, 14/0307, 14/05, 14/052, 14/07
Definitions Modified:	H04J	14/00

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):

G01J 9/00, G01M 11/30, G02B, G02B 6/00, G02B 6/10, G02B 6/26, G02F, G02F 1/29, H04B 10/00, H04L 9/0852, H04L 12/2856, H04L 12/2885, H04Q 11/0001

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)

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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 H04J 14/00 - MULTIPLEX COMMUNICATION

<u>Type*</u>	<u>Symbol</u>	<u>Indent Level</u> <u>Number of dots</u> <u>(e.g. 0, 1, 2)</u>	<u>Title</u> “CPC only” text should normally <u>be</u> <u>enclosed in {curly brackets}**</u>	<u>Transferred to#</u>
C	H04J 14/00	0	Optical multiplex systems	H04J 14/00, H04J 14/05, H04J 14/07
C	H04J 14/02	1	Wavelength-division multiplex systems	H04J 14/02, H04J 14/03, H04J 14/0305, H04J 14/0307
C	H04J 14/021	4	{Reconfigurable arrangements, e.g. reconfigurable optical add/drop multiplexers [ROADM] or tunable optical add/drop multiplexers [TOADM]}	H04J 14/021, H04J 14/02122, H04J 14/02126
C	H04J 14/0212	5	{using optical switches or wavelength selective switches [WSS]}	H04J 14/0212, H04J 14/02122, H04J 14/02126
N	H04J14/02122	5	{Colourless, directionless or contentionless [CDC] arrangements }	
N	H04J14/02126	5	{Multicast switch arrangements }	
C	H04J14/0221	2	{Power control, e.g. to keep the total optical power constant }	H04J 14/0221, H04J 14/02212, H04J 14/02214, H04J14/02216, H04J14/02218, H04J 14/02219
N	H04J 14/02212	3	{by addition of a dummy signal }	
N	H04J 14/02214	3	{by re-allocation of data channels }	
N	H04J 14/02216	3	{by gain equalization }	
N	H04J 14/02218	3	{Centralized control }	

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N	H04J 14/02219	3	{Distributed control}	
U	H04J 14/0242	4	{in WDM-PON}	
M	H04J 2014/0253	5	{Allocation of downstream wavelengths for upstream transmission}	
C	H04J14/0254	3	{Optical medium access}	H04J14/0254, H04J 14/02762, H04J 14/02764
M	H04J 14/0267	4	{Optical signaling or routing}	
M	H04J 14/0268	5	{Restoration of optical paths, e.g. p-cycles}	
M	H04J 14/0269	5	{using tables for routing}	
M	H04J 14/0272	4	{Transmission of OAMP information}	
U	H04J 14/0276	5	{using pilot tones}	
N	H04J 14/02762	4	{Spectrum slot allocation}	
N	H04J 14/02764	4	{Multiplex arrangements for radio-frequency networks access; policies therefor (radio over fibre arrangement H04B10/2575)}	
C	H04J 14/0278	2	{WDM optical network architectures}	H04J14/0278, H04J 14/02862
U	H04J 14/0286	3	{WDM hierarchical architectures}	
N	H04J 14/02862	3	{WDM data centre network [DCN] architectures}	
U	H04J 14/0298	2	{with sub-carrier multiplexing [SCM]}	
N	H04J 14/03	2	{WDM arrangements (ADM arrangements H04J 14/0202; WDM network architectures H04J14/0278)}	
N	H04J 14/0305	3	{in end terminals}	
N	H04J14/0307	3	{Multiplexers; Demultiplexers}	
C	H04J14/04	1	Mode multiplex systems	H04J14/04, H04J14/052
N	H04J14/05	1	{Spatial multiplexing systems}	
N	H04J14/052	2	{using multicore fibre (mode multiplex systems H04J 14/04)}	

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U	H04J 14/06	1	Polarisation multiplex systems	
N	H04J 14/07	1	{Orbital angular momentum [OAM] multiplex systems }	

*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 finalization 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)

SUBCLASS H04J - MULTIPLEX COMMUNICATION

<u>Type*</u>	<u>Location</u>	<u>Old Warning</u>	<u>New/Modified Warning</u>
New	H04J 14/00		Group H04J 14/00 is impacted by reclassification into groups H04J 14/05 and H04J 14/07. All groups listed in this Warning should be considered in order to perform a complete search.
New	H04J 14/02		Group H04J 14/02 is impacted by reclassification into groups H04J 14/03, H04J 14/0305 and H04J 14/0307. All groups listed in this Warning should be considered in order to perform a complete search.
New	H04J 14/021		Group H04J 14/021 is impacted by reclassification into groups H04J 14/02122 and H04J 14/02126. Groups H04J 14/021, H04J 14/02122 and H04J 14/02126 should be considered in order to perform a complete search.
New	H04J 14/0212		Group H04J 14/0212 is impacted by reclassification into groups H04J 14/02122 and H04J 14/02126. Groups H04J 14/0212, H04J 14/02122 and H04J 14/02126 should be considered in order to perform a complete search.
New	H04J 14/02122		Group H04J 14/02122 is incomplete pending reclassification of documents from groups H04J 14/021 and H04J 14/0212. Groups H04J 14/021, H04J 14/0212 and H04J 14/02122 should be considered in order to perform a complete search.
New	H04J 14/02126		Group H04J 14/02126 is incomplete pending reclassification of documents from groups H04J 14/021 and H04J 14/0212. Groups H04J 14/021, H04J 14/0212 and H04J 14/02126 should be considered in order to perform a complete search.
New	H04J 14/0221		Group H04J 14/0221 is impacted by reclassification into groups H04J 14/02212, H04J 14/02214, H04J 14/02216, H04J 14/02218 and H04J 14/02219. 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>	<u>Old Warning</u>	<u>New/Modified Warning</u>
New	H04J 14/02212		Group H04J 14/02212 is incomplete pending reclassification of documents from group H04J 14/0221. Groups H04J 14/0221 and H04J 14/02212 should be considered in order to perform a complete search.
New	H04J 14/02214		Group H04J 14/02214 is incomplete pending reclassification of documents from group H04J 14/0221. Groups H04J 14/0221 and H04J 14/02214 should be considered in order to perform a complete search.
New	H04J 14/02216		Group H04J 14/02216 is incomplete pending reclassification of documents from group H04J 14/0221. Groups H04J 14/0221 and H04J 14/02216 should be considered in order to perform a complete search.
New	H04J 14/02218		Group H04J 14/02218 is incomplete pending reclassification of documents from group H04J 14/0221. Groups H04J 14/0221 and H04J 14/02218 should be considered in order to perform a complete search.
New	H04J 14/02219		Group H04J 14/02219 is incomplete pending reclassification of documents from group H04J 14/0221. Groups H04J 14/0221 and H04J 14/02219 should be considered in order to perform a complete search.
New	H04J 14/0254		Group H04J 14/0254 is impacted by reclassification into groups H04J 14/02762 and H04J 14/02764. Groups H04J 14/0254, H04J 14/02762 and H04J 14/02764 should be considered in order to perform a complete search.
New	H04J 14/02762		Group H04J 14/02762 is incomplete pending reclassification of documents from group H04J 14/0254. Groups H04J 14/0254 and H04J 14/02762 should be considered in order to perform a complete search.
New	H04J 14/02764		Group H04J 14/02764 is incomplete pending reclassification of documents from group H04J 14/0254. Groups H04J 14/0254 and H04J 14/02764 should be considered in order to perform a complete search.
New	H04J 14/0278		Group H04J 14/0278 is impacted by reclassification into group H04J 14/02862. Groups H04J 14/0278

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<u>Type*</u>	<u>Location</u>	<u>Old Warning</u>	<u>New/Modified Warning</u>
			and H04J 14/02862 should be considered in order to perform a complete search.
New	H04J 14/02862		Group H04J 14/02862 is incomplete pending reclassification of documents from group H04J 14/0278. Groups H04J 14/0278 and H04J 14/02862 should be considered in order to perform a complete search.
New	H04J 14/03		Groups H04J 14/03, H04J 14/0305 and H04J 14/0307 are incomplete pending reclassification of documents from group H04J 14/02. All groups listed in this Warning should be considered in order to perform a complete search.
New	H04J 14/04		Group H04J 14/04 is impacted by reclassification into group H04J 14/052. Groups H04J 14/04 and H04J 14/052 should be considered in order to perform a complete search.
New	H04J 14/05		Group H04J 14/05 is incomplete pending reclassification of documents from group H04J 14/00. Groups H04J 14/00 and H04J 14/05 should be considered in order to perform a complete search.
New	H04J 14/052		Group H04J 14/052 is incomplete pending reclassification of documents from group H04J 14/04. Groups H04J 14/04 and H04J 14/052 should be considered in order to perform a complete search.
New	H04J 14/07		Group H04J 14/07 is incomplete pending reclassification of documents from group H04J 14/00. Groups H04J 14/00 and H04J 14/07 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.

H04J 14/02122

Definition statement

This place covers:

Colourless and/or directionless and/or contentionless reconfigurable ADM arrangements where there is no dependency to wavelength and/or for any added and dropped channels, any direction can be selected and/or for any added and dropped channels the same wavelength can be selected.

H04J 14/02126

Definition statement

This place covers:

Reconfigurable ADM arrangements where channels are multicast/broadcast to a plurality of directions, e.g. multicast OADM (MC-OADM).

H04J 14/02212

Definition statement

This place covers:

Arrangements for controlling/equalizing the optical power per channel or for groups of channels in a WDM system by adding a signal not carrying data, e.g. dummy wavelength(s), noise or pilot signal.

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H04J 14/02214

Definition statement

This place covers:

Arrangements for controlling/equalizing the optical power per channel or for groups of channels in a WDM system by adding/dropping/reallocating data channels, e.g. by adding/dropping/shuffling channel(s).

H04J 14/02216

Definition statement

This place covers:

Arrangements for controlling/equalizing the optical power per channel or for groups of channels in a WDM system by controlling attenuation/gain of the data channel(s).

H04J 14/02218

Definition statement

This place covers:

Controlling/equalizing the optical power per channel or for group of channels in a WDM system where management of power control is central, e.g. configured by the Network Management System (NMS).

H04J 14/02219

Definition statement

This place covers:

Controlling/equalizing the optical power per channel or for group of channels in a WDM system where each node of the system acts independently to control/equalize power.

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H04J 2014/0253

References

Informative references

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

Optical transmission using a single light source for multiple stations	H04B 10/2587
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H04J 14/0267

References

Informative references

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

Routing or path finding of packets in data switching networks	H04L 45/00
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H04J 14/0268

References

Informative references

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

Route fault recovery of packets in data switching networks	H04L 45/28
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H04J 14/0269

References

Informative references

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

Organization of routing tables of packets in data switching networks	H04L 45/54
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H04J 14/0272

References

Informative references

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

Arrangements for monitoring or testing transmission systems using a supervisory or additional signal for monitoring of optical transmission parameters	H04B 10/077
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H04J 14/02762

Definition statement

This place covers:

Spectrum allocation/assignment/optimisation for WDM systems, e.g. allocating flex-grid slots for channels, assigning super-channels or optimising spectral resources via de-fragmentation.

H04J 14/02764

Definition statement

This place covers:

WDM arrangements for medium access of radio-frequencies networks; wavelength allocation rules for such arrangement, e.g. any haul transport network for LTE/5G networks, for example via PON.

References

Limiting references

This place does not cover:

Radio-over-fibre arrangements	H04B10/2575
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H04J 14/02862

Definition statement

This place covers:

WDM architecture of Data Centre Networks (DCN).

H04J 14/03

Definition statement

This place covers:

WDM arrangements, e.g. equipment, included in terminals or line to enable WDM transmission.

References

Limiting references

This place does not cover:

ADM arrangements	H04J 14/0202
WDM network architectures	H04J14/0278

H04J 14/0305

Definition statement

This place covers:

WDM arrangements, e.g. equipment for end terminals, e.g. WDM transmitters/receivers or wavelength converters.

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H04J 14/0307

Definition statement

This place covers:

Multiplexers or demultiplexers, e.g. odd/even multiplexing or multistage.

References

Informative references

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

Optical coupling, mixing or splitting	G02B
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H04J 14/05

Definition statement

This place covers:

Systems where either optical wireless (i.e. free space), multiplexing (e.g. MIMO) or space division multiplexing (e.g. multicore) is used for multiplexing different channels of information.

H04J 14/052

Definition statement

This place covers:

Systems where the different cores of a multicore fibre are used to multiplex different channels of information.

References

Limiting references

This place does not cover:

Mode multiplex systems	H04J 14/04
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H04J 14/07

Definition statement

This place covers:

Systems where different orbital angular momenta of the light phase are used to multiplex different channels of information.

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2. A. DEFINITIONS (modified)

H04J 14/00

References

Delete: The entire Limiting references section.

Insert: The following eight new rows in the Informative references table.

Informative references

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

Frequency-division multiplex systems	H04J1/00
Combined time-division and frequency-division multiplex systems	H04J4/00
Multiplex systems in which the amplitudes or durations of the signals in individual channels are characteristic of those channels	H04J7/00
Multiplex systems in which each channel is represented by a different type of modulation of the carrier	H04J9/00
Orthogonal multiplex systems	H04J11/00
Code division multiplex systems	H04J13/00
Laser, amplifier per se	H01S3/00 , H01S5/00
Optical switching per se	H04Q11/0001

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:

ADM	Add-drop multiplex
CDC	Colourless, directionless or contentionless

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DCN	Data center network
OAM	Orbital angular momentum
OAMP	Operation, administration, maintenance or provisioning
OLT	Optical line termination
ONU	Optical network unit
ROADM	Reconfigurable optical add/drop multiplexers
SCM	Sub-carrier multiplexing
TDM	Time division multiplexing
TOADM	Tunable optical add/drop multiplexers
WDM	Wavelength division multiplexing
WDM-PON	WDM Passive Optical Network
WSS	Wavelength selective switches

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3. REVISION CONCORDANCE LIST (RCL)

<u>Type*</u>	<u>From CPC Symbol (existing)</u>	<u>To CPC Symbol(s)</u>
C	H04J 14/00	H04J 14/00, H04J 14/05, H04J 14/07
C	H04J 14/02	H04J 14/02, H04J 14/03, H04J 14/0305, H04J 14/0307
C	H04J 14/021	H04J 14/021, H04J 14/02122, H04J 14/02126
C	H04J 14/0212	H04J 14/0212, H04J 14/02122, H04J 14/02126
C	H04J 14/0221	H04J 14/0221, H04J 14/02212, H04J 14/02214, H04J 14/02216, H04J 14/02218, H04J 14/02219
C	H04J 14/0254	H04J 14/0254, H04J 14/02762, H04J 14/02764
C	H04J 14/0278	H04J 14/0278, H04J 14/02862
C	H04J 14/04	H04J 14/04, H04J 14/052

* 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)

<u>CPC</u>	<u>IPC</u>	<u>Action*</u>
H04J 14/02122	H04J 14/02	NEW
H04J 14/02126	H04J 14/02	NEW
H04J 14/02212	H04J 14/02	NEW
H04J 14/02214	H04J 14/02	NEW
H04J 14/02216	H04J 14/02	NEW
H04J 14/02218	H04J 14/02	NEW
H04J 14/02219	H04J 14/02	NEW
H04J 14/02762	H04J 14/02	NEW
H04J 14/02764	H04J 14/02	NEW
H04J 14/02862	H04J 14/02	NEW
H04J 14/03	H04J 14/02	NEW
H04J 14/0305	H04J 14/02	NEW
H04J 14/0307	H04J 14/02	NEW
H04J 14/05	H04J 14/00	NEW
H04J 14/052	H04J 14/00	NEW
H04J 14/07	H04J 14/00	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

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5. CROSS-REFERENCE LIST (CRL)

Scheme references impacted by this revision project

<u>Location of reference to be changed</u>	<u>Referenced subclass or group to be changed</u>	<u>Action; New reference symbol; New text</u>
H04J 2203/00	H04J 14/00	<u>Replace</u> H04J 14/00 with: H04J 14/05 and H04J 14/07
H04L 9/0852	H04J 14/02	<u>Replace</u> H04J 14/02 with: H04J 14/02; WDM arrangements H04J 14/03
H04L 12/2885	H04J 14/00	<u>Replace</u> H04J 14/00 with: H04J 14/05 and H04J 14/07

Definitions references impacted by this revision project

<u>Location of reference to be changed</u>	<u>Referenced subclass or group to be changed</u>	<u>Section of definition</u>	<u>Action; New reference symbol; New text</u>
G01J 9/00	H04J 14/00	Informative references	<u>Insert</u> : New symbols H04J 14/05 and H04J 14/07 in the last row, second column, of the Informative references table. H04J 14/00, H04J 14/05, H04J 14/07
G01M 11/30	H04J 14/00	Informative references	<u>Insert</u> : The following two new references in the Informative references table. Spatial multiplexing H04J 14/05 Orbital angular momentum [OAM] multiplex systems H04J 14/07
G02B 6/00	H04J 14/00	Relationships with other classification places	<u>Replace</u> H04J 14/00 with: H04J 14/00, H04J 14/05 and H04J 14/07
G02B 6/10	H04J 14/00	Informative references	<u>Replace</u> : In the <u>last</u> row of the Informative references table, the text "Multiplex systems" with "Optical multiplex systems" Optical multiplex systems H04J 14/00
G02B 6/26	H04J 14/02	Special rules of classification	<u>Replace</u> : In the paragraph beginning with "Systems for wavelength...", the first sentence of the paragraph with the following updated sentence.

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<u>Location of reference to be changed</u>	<u>Referenced subclass or group to be changed</u>	<u>Section of definition</u>	<u>Action; New reference symbol; New text</u>
			Systems for wavelength division multiplexing based on optical fibres are classified in H04J 14/02, H04J 14/03, H04J 14/0305 and H04J 14/0307.
G02F	H04J 14/00	Informative references	<u>Insert:</u> The following two new references in the Informative references table. Spatial multiplexing H04J 14/05 Orbital angular momentum [OAM] multiplex systems H04J 14/07
G02F 1/29	H04J 14/02	Relationships with other classification places	<u>Replace:</u> The existing Relationships text with the following updated text. Wavelength multiplexer/demultiplexer are classified in G02B 6/12007 for the optical details, and in H04J 14/02218 and H04J 14/02219 for the control details.
H04B 10/00	H04J 14/00	Informative references	<u>Insert:</u> The following two new references in the Informative references table. Spatial multiplexing H04J 14/05 Orbital angular momentum [OAM] multiplex systems H04J 14/07
H04B 10/00	H04J 14/00	Relationships with other classification places	<u>Replace:</u> In the second paragraph of the Relationships text, the phrase “H04J 14/00 deals” with the following text. H04J 14/00, H04J 14/05 and H04J 14/07 deal
H04B 10/03	H04J 14/02	Informative references	<u>Replace</u> the existing text “Fault recovery specific to wavelength division multiplex [WDM] systems” With the following text: Wavelength-division multiplex optical systems
H04B 10/032	H04J 14/02	Limiting references	<u>Insert:</u> The following new Limiting references section with the following reference. Protection in WDM systems H04J 14/0287
H04B 10/032	H04J 14/02	Application-oriented references	<u>Replace:</u> The existing Application oriented references text and symbols with the following updated text and symbols. Wavelength division multiplex [WDM] systems and WDM arrangements H04J 14/02, H04J 14/03

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<u>Location of reference to be changed</u>	<u>Referenced subclass or group to be changed</u>	<u>Section of definition</u>	<u>Action; New reference symbol; New text</u>
H04B 10/25753	H04J 14/0278	Informative references	<u>Replace</u> the existing text “WDM networks in general” With the following text: WDM optical network architectures
H04B 10/25753	H04J 14/0278	Informative references	<u>Insert</u> : The following new reference in the Informative references table. WDM data center network [DCN] architectures H04J 14/02862
H04B 10/2581	H04J 14/04	Informative references	<u>Insert</u> : The following new reference in the Informative references table. Using multicore fibre H04J 14/052
H04B 10/27	H04J 14/0278	Informative references	<u>Replace</u> the existing text “WDM networks” With the following text: <u>WDM optical network architectures</u>
H04B 10/27	H04J 14/0278	Informative references	<u>Insert</u> : The following new reference in the Informative references table. WDM data center network [DCN] architectures H04J 14/02862
H04B 10/294	H04J 14/0221	Informative references	<u>Replace</u> the existing text “Power control in WDM systems in general” With the following text: Power control, e.g. to keep the total optical power constant
H04B 10/294	H04J 14/0221	Informative references	<u>Insert</u> : The following two new references in the Informative references table. Centralized control H04J 14/02218 Distributed control H04J 14/02219
H04B 10/506	H04J 14/02	Informative references	<u>Replace</u> the existing text “WDM systems in general” With the following text: Wavelength-division multiplex systems
H04B 10/506	H04J 14/02	Informative references	<u>Insert</u> : The following new reference in the Informative references table.

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<u>Location of reference to be changed</u>	<u>Referenced subclass or group to be changed</u>	<u>Section of definition</u>	<u>Action; New reference symbol; New text</u>
			WDM arrangements H04J 14/03
H04J 3/1652	H04J 14/02	Informative references	<u>Replace</u> the existing text “Optical wavelength networks” With the following text: Optical wavelength-division multiplex systems
H04J 3/1652	H04J 14/02	Informative references	<u>Insert:</u> The following new reference in the Informative references table. WDM optical network architectures H04J 14/0278
H04Q 11/0001	H04J 3/00, H04J 14/02	Informative references	<u>Replace</u> the existing text “SONET/SDH networks” With the following text: Optical time-division multiplex systems
H04Q 11/0001	H04J 14/0278	Informative references	<u>Insert:</u> The following new reference in the Informative references table. WDM optical network architectures H04J 14/0278
H04Q 11/0001	H04J 14/02862	Informative references	<u>Insert:</u> The following new reference in the Informative references table. WDM data center network [DCN] architectures H04J 14/02862
H04Q 11/0001	H04J 14/04	Informative references	<u>Replace</u> the existing text “Non reconfigurable add-and-drop multiplexing” With the following text: Mode multiplex optical systems
H04Q 11/0001	H04J 14/04	Informative references	<u>Insert:</u> The following new reference in the Informative references table. With the following text: Using multicore fibre H04J 14/052