

EUROPEAN PATENT OFFICE
U.S. PATENT AND TRADEMARK OFFICE

CPC NOTICE OF CHANGES 1718

DATE: MAY 1, 2025

PROJECT RP12306

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

| <u>Action</u> | <u>Subclass</u> | <u>Group(s)</u> |
|---|------------------------|--|
| SCHEME: | | |
| Symbols Deleted: | H04L | 61/2542, 61/2571 |
| Symbols New: | H04L | 61/2591 |
| Notes Modified: | H04L | 61/00 |
| DEFINITIONS: | | |
| Definitions Deleted: (no frozen (F) symbol definitions should be deleted) | H04L | 61/2571 |
| Definitions Modified: | H04L | 61/00, 61/09, 61/10, 61/106, 61/251, 61/2539, 61/2546, 61/256, 61/2564, 61/2578, 61/4523 |

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

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

1. CLASSIFICATION SCHEME CHANGES

- ☒ A. New, Modified or Deleted Group(s)
- ☐ B. New, Modified or Deleted Warning(s)
- ☒ C. New, Modified or Deleted Note(s)
- ☐ D. New, Modified or Deleted Guidance Heading(s)

2. DEFINITIONS

- ☒ A. New or Modified Definitions (Full definition template)
- ☒ B. Modified or Deleted Definitions (Definitions Quick Fix)

3. ☒ REVISION CONCORDANCE LIST (RCL)

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

5. ☐ CHANGES TO THE CROSS-REFERENCE LIST (CRL)

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1. CLASSIFICATION SCHEME CHANGES

A. New, Modified or Deleted Group(s)**SUBCLASS H04L - TRANSMISSION OF DIGITAL INFORMATION, e.g. TELEGRAPHIC COMMUNICATION**

| Type* | Symbol | Indent Level Number of dots (e.g. 0, 1, 2) | Title “CPC only” text should normally be enclosed in {curly brackets}** | Transferred to[#] |
|--------------|---------------|---|--|--|
| T | H04L61/2503 | 3 | Translation of Internet protocol [IP] addresses | |
| D | H04L 61/2542 | 4 | {involving dual-stack hosts} | <administrative transfer to H04L61/2503 and H04L2101/686 simultaneously> |
| D | H04L 61/2571 | 5 | {for identification, e.g. for authentication or billing (charging arrangements H04L12/14)} | <administrative transfer to H04L61/2591> |
| U | H04L 61/2589 | 5 | over a relay server, e.g. traversal using relay for network address translation [TURN] | |
| N | H04L 61/2591 | 4 | {Identification of devices behind NAT devices} | |
| T | H04L 2101/686 | 2 | using dual-stack hosts, e.g. in Internet protocol version 4 [IPv4]/Internet protocol version 6 [IPv6] networks | |

*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.

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- 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.

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C. New, Modified or Deleted Note(s)**SUBCLASS H04L - TRANSMISSION OF DIGITAL INFORMATION, e.g. TELEGRAPHIC COMMUNICATION**

| <u>Type*</u> | <u>Location</u> | <u>Old Note</u> | <u>New/Modified Note</u> |
|---------------------|------------------------|--|--|
| M | H04L 61/00 | <p>This group does not cover:</p> <ul style="list-style-type: none"> – aspects relating to switching or routing which are covered by groups H04L 45/00 or H04L 49/00; – aspects relating to configuration management of data networks or network elements in general, which are covered by group H04L 41/08 – aspects of addressing in telephony which are covered by group H04M 7/00; – aspects of addressing within devices, e.g. process or memory, which are covered by groups G06F 13/42 or G06F 12/00. | <p>This group does not cover:</p> <ul style="list-style-type: none"> • {aspects relating to switching or routing which are covered by groups H04L 45/00 or H04L 49/00;} • {aspects relating to configuration management of data networks or network elements in general, which are covered by group H04L 41/08} • {aspects of addressing in telephony which are covered by group H04M 7/00;} • {aspects of addressing within devices, e.g. process or memory, which are covered by groups G06F 13/42 or G06F 12/00.} |

*N = new note, M = modified note, D = deleted note

NOTE: The “Location” column only requires the symbol PRIOR to the location of the note. No further directions such as “before” or “after” are required.

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2. A. DEFINITIONS (modified)

H04L 61/00

Replace: The last bullet statement of the Definition statement with the following updated one so that the entire Definition statement appears as follows.

Definition statement

This place covers:

The following aspects of addressing and naming in data networks:

- Conversion and mapping of addresses, which includes mapping between different types of addresses, e.g. ARP or mapping between telephone numbers and IP addresses and mapping between the same type of addresses, e.g. NAT
- Directories and name-to-address resolution, e.g. DNS, LDAP, X.500, address books
- Allocation of addresses, e.g. DHCP
- Logical names, in particular aspects relating to the registration, conversion and structure of e.g. domain names, e-mail addresses or SIP-URIs
- Use of addresses for implementing special network functionalities.

Replace: The existing Special rules text with the following updated text.

Special rules of classification

- Address resolution is classified in group [H04L 61/10](#), whereas name-to-address-resolution is classified in group [H04L 61/50](#).
- ENUM is based on DNS and should therefore be classified under Directories in [H04L 61/4557](#) and not in [H04L 61/106](#).
- The Address Allocation subgroup [H04L 61/5084](#) covers "portability" aspects not covered in [H04W 8/26](#) or [H04W 80/04](#), e.g. nomadic users in a hotel.
- IPv4 and IPv6 addresses are considered to be of the same type. Therefore, a mapping between these address types should be classified in [H04L 61/251](#) and not in [H04L 61/10](#).
- The Details subgroups ([H04L 2101/00](#)) should be used as an additional classification in [H04L 61/00](#), i.e. if other [H04L 61/00](#) subgroups in the range [H04L 61/10](#) - [H04L 61/35](#) have already been assigned.

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H04L 61/09

Delete: The last line of the Definition statement so that the updated statement appears as follows.

Definition statement

This place covers:

The pairing of addresses, which require a mapping or a conversion in the network. Specific examples are given in the subgroups.

Insert: The following new Special rules section.

Special rules of classification

The mapping of names to addresses is classified in the subgroups of H04L 61/45.

H04L 61/10

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

Definition statement

This place covers:

The pairing of addresses of different types which require a mapping or conversion in the network.

IPv4 and IPv6 addresses are considered to be of the same type in the context of this group.

Replace: The existing Special rules text with the following updated text.

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Special rules of classification

Directory aspects should be classified in the subgroups of [H04L 61/45](#). Mapping of addresses of the same type, e.g. NAT, is classified in [H04L 61/25](#) and mapping of IPv4 and IPv6 addresses is classified in [H04L 61/2503](#).

The type of addresses should be classified with orthogonal indexing [H04L2101/00](#) groups.

[H04L 61/106](#)

Replace: The term “address” with “addresses” so that the updated statement appears as follows.

Definition statement

This place covers:

The pairing of addresses across networks. The paired addresses relate to the same network entity. A typical example for a pairing across networks is the mapping of an IP address to a telephone number or to an address of a special purpose network.

IPv6 and IPv4 addresses are considered to be of the same type in the context of this group and the pairing of IPv4/IPv6 addresses is therefore classified in [H04L 61/2503](#).

[H04L 61/251](#)

Delete: The last line of the Definition statement so that the updated statement appears as follows.

Definition statement

This place covers:

Pairing of IPv4 and IPv6 addresses, e.g. NAT64.

Insert: The following new Special rules section.

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Special rules of classification

Encapsulation is classified in [H04L 12/4633](#).

H04L 61/2539

Insert: The following new Special rules section.

Special rules of classification

Aliases classified in H04L61/30 are not, per se, considered to be anonymous.

H04L 61/2546

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

Definition statement

This place covers:

Mechanisms for avoiding unnecessary address translation, e.g. to avoid the routing of traffic via NAT devices to an external network, if both endpoints are in the same internal network.

H04L 61/256

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

Definition statement

This place covers:

Any aspects relating to the traversal of NAT, e.g. enabling the connection between internal network nodes and external network nodes.

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H04L 61/2564

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

Definition statement

This place covers:

Traversal of NAT for OSI protocol layers 5 to 7, such as SIP or SNMP.

H04L 61/2578

Replace: The symbol in the Definition statement so that the updated statement reads as follows.

Definition statement

This place covers:

Address translation traversal methods, which are transparent to the NAT server, contrary to the methods classified in [H04L 61/2582](#).

H04L 61/4523

Delete: The last line of the Definition statement so that the updated statement appears as follows.

Definition statement

This place covers:

The use of the LDAP protocol, e.g. Active Directory.

Insert: The following new Special rules section.

Special rules of classification

Aspects relating to the directories based on the X.500 standard are classified in [H04L 61/4517](#).

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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 |
|--------------|---|--------------------------------------|------------------------------|
| H04L 61/2571 | | | Delete the 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)

| <u>Type*</u> | <u>From CPC Symbol (existing)</u> | <u>To CPC Symbol(s)</u> |
|---------------------|--|--|
| D | H04L 61/2542 | <administrative transfer to H04L 61/2503 and H04L 2101/686 simultaneously> |
| D | H04L 61/2571 | <administrative transfer to H04L 61/2591> |

* 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> |
|--------------|--------------|----------------|
| H04L 61/2542 | | DELETE |
| H04L 61/2571 | | DELETE |
| H04L 61/2591 | H04L 61/2503 | NEW |

* Action column:

- For an (N) or (Q) entry, provide an IPC symbol and complete the Action column with “NEW.”
- For an existing CPC main trunk entry or indexing entry where the existing IPC symbol needs to be changed, provide an updated IPC symbol and complete the Action column with “UPDATED.”
- For a (D) CPC entry or indexing entry complete the Action column with “DELETE.” IPC symbol does not need to be included in the IPC column.
- For an (N) 2000 series CPC entry which is positioned within the main trunk scheme (breakdown code) provide an IPC symbol and complete the action column with “NEW”.
- For an (N) 2000 series CPC entry positioned at the end of the CPC scheme (orthogonal code), with no IPC equivalent, complete the IPC column with “CPCONLY” and complete the action column with “NEW”.

NOTES:

- F symbols are not included in the CICL table above.
- T and M symbols are not included in the CICL table above unless a change to the existing IPC is desired.