EUROPEAN PATENT OFFICE U.S. PATENT AND TRADEMARK OFFICE

CPC NOTICE OF CHANGES 1154

DATE: AUGUST 1, 2021

PROJECT RP0680

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

| Action | Subclass | Group(s) |
|-----------------------|----------|--|
| SCHEME: | | |
| Symbols Deleted: | H04L | 12/4011 |
| | | |
| Titles Changed: | H04L | Subclass |
| | H04L | 1/00, 1/02, 1/14, 1/1858, 1/189, 1/22 |
| | H04L | 5/08, 5/16, 5/20 |
| | H04L | 7/00, 7/02, 7/06 |
| | H04L | 12/14, 12/18, 12/28 |
| | H04L | 13/04, 13/14 |
| | H04L | 15/00 |
| | H04L | 17/00 |
| | H04L | 25/02, 25/03, 25/06, 25/10, 25/12, 25/14, 25/22, |
| | | 25/40, 25/45, 25/497 |
| | H04L | 27/00, 27/01, 27/10 |
| | | |
| DEFINITIONS: | | |
| Definitions Deleted: | H04L | 12/4011 |
| | | |
| Definitions New: | H04L | 5/08, 5/20 |
| | H04L | 13/04, 13/14 |
| | H04L | 25/02, 25/03, 25/06, 25/10, 25/12, 25/40, 25/45, |
| | | 25/49 |
| | H04L | 27/01, 27/10 |
| | | |
| Definitions Modified: | H04L | Subclass |
| | H04L | 1/00, 1/02, 1/08, 1/14, 1/18, 1/189, 1/22 |
| | H04L | 5/00 |
| | H04L | 7/00, 7/02, 7/04 |
| | H04L | 12/14, 12/18, 12/28, 12/40, 12/40052 |
| | H04L | 15/00 |
| | H04L | 17/00 |
| | H04L | 25/22, 25/497 |
| | H04L | 27/00 |

This Notice of Changes impacts no other subclasses/groups.

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

1. CLASSIFICATION SCHEME CHANGES

A. New, Modified or Deleted Group(s)

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| | B. New, Modified or Deleted Warning(s) |
|--------|--|
| | C. New, Modified or Deleted Note(s) |
| | D. New, Modified or Deleted Guidance Heading(s) |
| 2. DEF | FINITIONS |
| | 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 (arrangements common to telegraphic and telephonic communication H04M)

| Type* | <u>Symbol</u> | Indent Level Number of dots (e.g. 0, 1, 2) | Title "CPC only" text should normally be enclosed in {curly brackets}** | Transferred to [#] |
|-------|---------------|---|---|-----------------------------|
| M | H04L | Subclass | TRANSMISSION OF DIGITAL INFORMATION, e.g. TELEGRAPHIC COMMUNICATION ({coding or ciphering apparatus for cryptographic or other purposes involving the need for secrecy G09C;} arrangements common to telegraphic and telephonic communication H04M) | |
| M | H04L 1/00 | 0 | Arrangements for detecting or preventing errors in the information received {(correcting synchronisation H04L 7/00)} | |
| M | H04L 1/02 | 1 | by diversity reception | |
| M | H04L 1/14 | 2 | in which the signals are sent back to the transmitter to be checked {; echo systems} | |
| M | H04L 1/1858 | 5 | {Transmission or retransmission of more than one copy of acknowledgement message} | |
| M | H04L 1/189 | 5 | {Transmission or retransmission of more than one copy of a message} | |
| M | H04L 1/22 | 1 | using redundant apparatus to increase reliability | |
| U | H04L 5/00 | 0 | Arrangements affording multiple use of the transmission path | |
| M | H04L 5/08 | 3 | each combination of signals in different channels being represented by a fixed frequency | |

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| Type* | <u>Symbol</u> | Indent Level Number of dots (e.g. 0, 1, 2) | Title "CPC only" text should normally be enclosed in {curly brackets}** | Transferred to# |
|-------|---------------|--|---|--|
| U | H04L 5/14 | 1 | Two-way operation using the same type of signal, i.e. duplex | |
| M | H04L 5/16 | 2 | Half-duplex systems; Simplex/duplex switching; Transmission of break signals {non-automatically inverting the direction of transmission} | |
| M | H04L 5/20 | 1 | using different combinations of lines, e.g. phantom working | |
| U | H04L 5/22 | 1 | using time-division multiplexing | |
| M | H04L 7/00 | 0 | Arrangements for synchronising receiver with transmitter {(synchronisation of generators of electric oscillations or pulses H03L 7/00)} | |
| М | H04L 7/02 | 1 | Speed or phase control by the received code signals, the signals containing no special synchronisation information {(H04L 7/0075 takes precedence)} | |
| M | H04L 7/06 | 2 | the synchronisation signals differing from the information signals in amplitude, polarity or frequency {or length} | |
| M | H04L 12/14 | 2 | Charging {, metering or billing} arrangements {for data wireline or wireless communications} | |
| M | H04L 12/18 | 3 | for broadcast or conference {, e.g. multicast} | |
| M | H04L 12/28 | 1 | characterised by path configuration, e.g. LAN [Local Area Networks] or WAN [Wide Area Networks] (wireless communication networks H04W {; arrangements for dividing the transmission path H04W 40/00}) | |
| D | H04L 12/4011 | 4 | {Wireless (wireless communication networks H04W)} | < administrative transfer to H04L 12/40052> |
| M | H04L 13/04 | 2 | Driving mechanisms; Clutches | |

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| Type* | Symbol | Indent <u>Level</u> <u>Number</u> of dots (e.g. 0, 1, 2) | Title "CPC only" text should normally be enclosed in {curly brackets}** | Transferred to# |
|-------|------------|---|---|-----------------|
| M | H04L 13/14 | 4 | Electronic distributors | |
| М | H04L 15/00 | 0 | Apparatus or local circuits for transmitting or receiving dot-and-dash codes, e.g. Morse code (teaching apparatus therefor G09B; telegraph tapping keys H01H 21/86) | |
| M | H04L 17/00 | 0 | Apparatus or local circuits for transmitting or receiving codes wherein each character is represented by the same number of equallength code elements, e.g. Baudot code | |
| M | H04L 25/02 | 1 | Details {(in line transmission systems H04B 3/02); Arrangements for supplying electrical power along data transmission lines (systems for transmitting signals via power distribution lines H04B 3/54)} | |
| M | H04L 25/03 | 2 | Shaping networks in transmitter or receiver, e.g. adaptive shaping networks {; Receiver end arrangements for processing baseband signals} | |
| M | H04L 25/06 | 2 | Dc level restoring means; Bias distortion correction {; Decision circuits providing symbol by symbol detection} | |
| U | H04L 25/08 | 2 | Modifications for reducing interference; Modifications for reducing effects due to line faults {; Receiver end arrangements for detecting or overcoming line faults} | |
| M | H04L 25/10 | 2 | Compensating for variations in line balance | |
| M | H04L 25/12 | 2 | Compensating for variations in line impedance | |
| M | H04L 25/14 | 2 | Channel dividing arrangements {, i.e. in which a single bit stream is divided between several baseband channels and reassembled at the receiver} | |
| M | H04L 25/22 | 3 | Repeaters for converting two wires to four wires; Repeaters for converting single current to double current | |

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| Type* | <u>Symbol</u> | Indent Level Number of dots (e.g. 0, 1, 2) | Title "CPC only" text should normally be enclosed in {curly brackets}** | Transferred to [#] |
|-------|---------------|--|---|-----------------------------|
| M | H04L 25/40 | 2 | Transmitting circuits; Receiving circuits {(repeater circuits, relay circuits H04L 25/20)} | |
| M | H04L 25/45 | 3 | using electronic distributors | |
| M | H04L 25/497 | 4 | by correlative coding, e.g. partial response coding or echo modulation coding {transmitters and receivers for partial response systems (transversal equalizers at the transmitter end H04L 25/03343)} | |
| M | H04L 27/00 | 0 | Modulated-carrier systems | |
| M | H04L 27/01 | 1 | Equalisers {(baseband equalizers at the transmitter end H04L 25/03343; in analogue transmission systems H04B 3/04, H04B 7/005)} | |
| M | H04L 27/10 | 1 | Frequency-modulated carrier systems, i.e. using frequency-shift keying (H04L 27/32 takes precedence) | |

*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.

- **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.

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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 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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2. A. DEFINITIONS (new)

Insert: The following new Definitions.

H04L 5/08

References

Informative references

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

| Frequency regulation arrangements | H04L 27/16 |
|-----------------------------------|------------|
|-----------------------------------|------------|

H04L 5/20

References

Informative reference

| Phantom interconnection between telephone switching | H04M 7/08 |
|---|--------------|
| centres | |
| Arrangements for coupling to multiple lines, e.g. for | H04L 25/0272 |
| differential transmission | |

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H04L 13/04

References

Informative reference

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

| Couplings for transmitting rotation; clutches | F16D |
|--|-------|
| 1 Couplings for transmitting rotation, claterios | 1.105 |

H04L 13/14

References

Informative reference

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

| Electronic switching or gating H03K 17/00 |
|---|
|---|

H04L 25/02

References

Limiting references

This place does not cover:

| In line transmission systems | H04B 3/02 |
|---|-----------|
| Systems for transmitting signals via power distribution lines | H04B 3/54 |

Informative references

| Circuits in general for handling pulses | H03K |
|---|------|
|---|------|

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H04L 25/03

References

Informative references

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

| Impedance networks per se |
|---------------------------|
|---------------------------|

H04L 25/06

References

Informative references

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

| Detection of unique words or other known elements | H04L 7/00, |
|---|--------------|
| ' | H04J 3/0602 |
| | 11043 3/0002 |

H04L 25/10

References

Informative references

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

H04L 25/12

References

Informative references

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

| Impedance matching in coupling arrangements | H04L 25/0278 |
|---|--------------|

H04L 25/40

References

Limiting references

This place does not cover:

| Repeater circuits, relay circuits | H04L 25/20 |
|-----------------------------------|------------|
| | |

Informative references

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

| Arrangements for synchronising receiver with transmitter | H04L 7/00 |
|---|------------|
| Using the transitions of the received signal to control the | H04L 7/033 |
| phase of the synchronising-signal-generating means | |
| Transmitting and receiving encryption devices | H04L 9/12 |
| synchronised or initially set up in a particular manner | |

H04L 25/45

References

Informative references

| Electronic distributors in general | H03K 17/00 |
|------------------------------------|------------|
|------------------------------------|------------|

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H04L 25/49

References

Limiting references

This place does not cover:

| Spectral shaping | H04L 25/03828 |
|------------------|---------------|

Informative references

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

| Preprocessing of received signal for synchronisation, e.g. by code conversion | H04L 7/0087 |
|---|-------------|
| Coding, decoding or code conversion, in general | H03M |

H04L 27/01

References

Limiting references

This place does not cover:

| Baseband equalizers at the transmitter | H04L 25/03343 |
|--|---------------|
| In analogue transmission systems | H04B 3/04, |
| | H04B 7/005 |

Informative references

| Control of amplification | H03G |
|--------------------------|------|

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H04L 27/10

References

Limiting references

This place does not cover:

| Carrier systems in general comprising amplitude- | H04L 27/32 |
|--|------------|
| modulated carrier systems, and phase-modulated carrier | |
| systems | |

Informative references

| The signals being represented by different frequencies | H04L 5/06 |
|--|----------------|
| The synchronisation signals differing from the information | H04L 7/06 |
| signals in amplitude, polarity, or frequency | |
| Continuous phase systems | H04L 27/18 |
| Frequency multiplication | H04L 2027/0048 |

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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 | Limiting references | | Insert: The following new row into the Limiting references table: Coding or ciphering apparats for cryptographic or other purposes involving the need for secrecy G09C |
| H04L | Informative references | | Delete: The following row from the Informative references table: Ciphering or deciphering apparatus per se G09C |
| H04L 1/00 | Limiting references | Codes for error detection or error correction per se, i.e. theoretical code construction and coding circuit architecture designs H03M 13/00 Transmission H04B | Replace: The existing two table rows with the following single row: Correcting synchronisation H04L 7/00 |
| H04L 1/00 | Informative references | | Delete: The following row from the Informative references table: Error correction in synchronization H04L 7/00 |

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| H04L 1/00 | Informative references | Insert: The following two rows into the Informative references table: Codes for error detection or error correction per se, i.e. theoretical code construction and coding circuit architecture designs H03M 13/00 Transmission H04B |
|-----------|------------------------|---|
| H04L 1/02 | Limiting references | <u>Delete</u> : The entire Limiting references section. |
| H04L 1/02 | Informative references | Insert: The following new Informative references section and table: Informative references Attention is drawn to the following places, which may be of interest for search: Radio diversity arrangements (except space-time coded arrangements) are covered by H04B 7/02 |

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| H04L 1/08 | Limiting references | Insert: The following new Limiting references section and table. Limiting references This place does not cover: Transmission or retransmission of more than one copy of an acknowledgement message H04L 1/1858 Transmission or retransmission of more than one copy of a message H04L 1/189 |
|-----------|------------------------|---|
| H04L 1/08 | Informative references | Delete: The following two references from the Informative references table: Transmission or retransmission of more than one copy of an acknowledgement message H04L 1/1858 Transmission or retransmission of more than one copy of a message H04L 1/189 |
| H04L 1/14 | Limiting references | <u>Delete</u> : The entire Limiting references section and table. |
| H04L 1/14 | Informative references | Insert: The following row into the Informative references table. Echo cancellation H04B 3/20 |

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| H04L 1/18 | Limiting references | <u>Delete</u> : The entire Limiting references section. |
|------------|---------------------------------|---|
| H04L 1/18 | Informative references | Insert: The following new Informative references section and table: |
| | | Informative references |
| | | Attention is drawn to the following places, which may be of interest for search: |
| | | Transmission control protocol/internet protocol [TCP/IP] or user datagram protocol [UDP] H04L 69/16 |
| H04L 1/189 | Informative references | Insert: The following new Informative references section and table: |
| | | Informative references |
| | | Attention is drawn to the following places, which may be of interest for search: |
| | | Repetition coding in general H04L 1/08 |
| H04L 1/189 | Special rules of classification | <u>Delete</u> : The entire Special rules of classification section. |
| H04L 1/22 | Limiting references | <u>Delete</u> : The entire Limiting references section. |

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| H04L 1/22 | Informative references | Insert: The following new Informative references section and table: |
|-----------|------------------------|--|
| | | Informative references |
| | | Attention is drawn to the following places, which may be of interest for search: |
| | | Redundancy in electrical buses H04L 12/40176 |
| | | Redundant control systems G05B 9/03 |
| | | Error detection / correction G06F 11/08 |
| | | Redundant systems in computer networks G06F 11/16 |
| | | Switching spare elements G06F 11/20 |
| | | Other transmission systems with redundant channels H04B 1/74 |
| H04L 5/00 | Informative references | Insert: The following three rows into the Informative references: |
| | | Multicarrier modulation techniques H04L 27/2626 |
| | | Multicarrier demodulation techniques H04L 27/2647 |
| | | Multicarrier synchronisation aspects |

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| | | H04L 27/2655 |
|------------|------------------------|---|
| 11041 7/00 | Linaitia a | Deleter The fellowing six years |
| H04L 7/00 | Limiting references | <u>Delete</u> : The following <u>six</u> rows from the Limiting references table: |
| | | Synchronization of OFDM H04L 27/2601 |
| | | Synchronisation of electronic time-pieces G04G 7/00 |
| | | Synchronization in CDMA H04B 1/69 |
| | | Synchronization of frames and in TDM networks, including timestamps H04J 3/06 |
| | | Synchronising in TV system H04N 5/04 |
| | | Regeneration of clock signals for television systems H04N 7/0352 |
| H04L 7/00 | Limiting references | Insert: The following row into the Limiting references table: |
| | | Synchronisation of automatic control of frequency or phase H03L 7/00 |
| H04L 7/00 | Informative references | Delete: The following row from the Informative references table: |
| | | PLL or DLL H03L 7/00 |
| H04L 7/00 | Informative references | Insert: The following six rows into the Informative references table: |

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| | | Synchronization of OFDM H04L 27/2601 |
|-----------|---------------------|---|
| | | Synchronisation of electronic time-pieces G04G 7/00 |
| | | Synchronization in CDMA H04B 1/69 |
| | | Synchronization of frames and in TDM networks, including timestamps H04J 3/06 |
| | | Synchronising in TV system H04N 5/04 |
| | | Regeneration of clock signals for television systems H04N 7/0352 |
| H04L 7/02 | Limiting references | <u>Delete</u> : The following <u>two</u> rows from the Limiting references table: |
| | | using the properties of error detecting or error correcting codes H04L 7/048 |
| | | Tuning resonant circuits H03J |

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| H04L 7/02 | Informative references | Insert: The following two rows into the Informative references table: Using the properties of error detecting or error correcting codes H04L 7/048 Tuning resonant circuits H03J |
|-----------|------------------------|---|
| H04L 7/04 | Limiting references | Insert: The following new Limiting references section and table: Limiting references This place does not cover: With photonic or optical means H04L 7/0075 |
| H04L 7/04 | Informative references | Delete: The following row from the Informative references table: Buffers between clock domains G06F 5/06; H04L 7/00 |
| H04L 7/04 | Informative references | Insert: The following two rows into the Informative references table: For changing the speed of data flow, i.e. speed regularizing G06F 5/06 Arrangements for synchronising receiver with transmitter H04L 7/00 |

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| H04L 12/14 | Limiting references | <u>Delete</u> : The entire Limiting references section. |
|------------|------------------------|---|
| H04L 12/14 | Informative references | Insert: The following Informative references section and table: |
| | | Informative references |
| | | Attention is drawn to the following places, which may be of interest for search: |
| | | Payment schemes, architectures or protocols G06Q 20/00 |
| | | Billing for commerce in data processing systems or methods specially adapted for administrative, commercial, financial, managerial, supervisory or forecasting purposes; this includes the non-technical aspects that relate to billing and charging in data networks G06Q 30/00 |
| H04L 12/18 | Limiting references | <u>Delete</u> : The entire Limiting references section. |

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| H04L 12/18 | Informative references | Insert: The following eight rows into the Informative references table. |
|------------|------------------------|---|
| | | One-way streaming of real- time multimedia data H04L 29/06448 |
| | | Routing aspects for multicast H04L 45/16 |
| | | Flow control for multicast H04L 47/18 |
| | | Packet switches for multicast or broadcast H04L 49/201 |
| | | Telephone conferences H04M 3/56 |
| | | Video conferences H04N 7/15 |
| | | Arrangements for the radio link of a wireless network for broadcast or multicast services such as MBMS, e.g. radio channel allocation H04W 4/06 |
| | | Push-to-talk systems H04W 4/10, H04L 29/06442 |

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| H04L 12/28 | Limiting references | Insert: The following new Limiting references section and table: |
|------------|------------------------|--|
| | | Limiting references |
| | | This place does not cover: |
| | | Wireless communication networks H04W |
| | | Arrangements for dividing the transmission path H04W 40/00 |
| H04L 12/28 | Informative references | Insert: The following new Informative references section and table: |
| | | Informative references |
| | | Attention is drawn to the following places, which may be of interest for search: |
| | | Connectivity information management, e.g. connectivity discovery or connectivity update H04W 40/24 |
| H04L 12/40 | Limiting references | <u>Delete</u> : The entire Limiting references section. |

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| H04L 12/40 | Informative references | Insert: The following nine rows into the Informative references table. |
|------------|------------------------|--|
| | | Transmission of data and power over a link, and not over a bus network as defined above H04L 12/10 |
| | | Serial data transmission over a shared medium having a ring or star topology H04L 12/42, H04L 12/44 |
| | | Fibre-channel aspects related to topology, i.e. ring, or switch architecture H04L 12/42, H04L 49/00 |
| | | Bus networks including at least one bridging device H04L 12/4625 |
| | | Bus networks employed restrictively for a specific automotive application (e.g. power steering, brake-bywire) B60R, B62D |
| | | Bus to control actuators/sensors or any other industrial appliance in an automation system G05B 19/00 |
| | | Parallel bus systems G06F 13/00 |
| | | Point-to-point communication between 2 stations over a bus G06F 13/4265 |

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| | | | Wireless networks comprising several communication nodes using contention resolution mechanisms H04W 74/08 |
|---------------|------------------------|--|---|
| H04L 12/40052 | Informative references | Bus transfer protocol on a daisy chain bus using an embedded synchronization G06F 13/426 | Replace: The existing Informative references table row with the following new row: Synchronisation, e.g. postwait, barriers, locks G06F 8/458 |
| H04L 12/40052 | Limiting references | | Insert: The following new Limiting references section and table: Limiting references Attention is drawn to the following places, which may be of interest for search: Bus transfer protocol on a daisy chain bus using an embedded synchronization G06F 13/426 |
| H04L 12/4011 | | | Delete: The entire Definition. |
| H04L 15/00 | Limiting references | | Delete: The following three references: having a plurality of operating members associated with different sets of contacts H01H 13/70 characterised by the way in which the control signal is generated |

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| | | H03K 17/94 coding in connection with keyboards or like devices H03M 11/00 |
|------------|------------------------|--|
| H04L 15/00 | Informative references | Insert: The following new Informative references section and table: Informative references Attention is drawn to the following places, which may be of interest for search: Having a plurality of operating members associated with different sets of contacts H01H 13/70 Characterised by the way in which the control signal is generated H03K 17/94 Coding in connection with keyboards or like devices H03M 11/00 |
| H04L 17/00 | Limiting references | <u>Delete</u> : The entire Limiting references section. |

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| H04L 17/00 | Informative references | Insert: The following new Informative references section and table: |
|------------|------------------------|---|
| | | Informative references |
| | | Attention is drawn to the following places, which may be of interest for search: |
| | | Having a plurality of operating members associated with different sets of contacts H01H 13/70 |
| | | Characterised by the way in which the control signal is generated H03K 17/94 |
| | | Coding in connection with keyboards or like devices H03M 11/00 |
| H04L 25/22 | Limiting references | <u>Delete</u> : The entire Limiting references section. |
| H04L 25/22 | Informative references | Insert: The following new Informative references section and table: |
| | | Informative references |
| | | Attention is drawn to the following places, which may be of interest for search: |
| | | Repeaters for converting two wires to four wires H04B |

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| H04L 25/497 | Limiting references | response systems (transversal equalizers H04L 25/03 partial response continuous phase modulation systems H04L 27/18 | Replace: The existing two table rows with the following single row: Transmitters and receivers for partial response systems equalizers at the transmitter end H04L 25/03343 |
|-------------|------------------------|--|---|
| H04L 25/497 | Informative references | | Insert: The following new Informative references section and table: Informative references Attention is drawn to the following places, which may be of interest for search: Response systems (transversal equalizers H04L 25/03 Partial response continuous phase modulation systems H04L 27/18 |
| H04L 27/00 | Limiting references | | <u>Delete</u> : The entire Limiting references section. |

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| H04L 27/00 | Informative references | t: The following rows into the native references table: |
|------------|------------------------|---|
| | | Modulated-carrier systems (code shift keying in combination with frequency multiplexing H04L 5/06 |
| | | Simultaneous bidirectional transmission of ac signals H04L 5/143 |
| | | Code Shift Keying; CCK (complementary code keying) H04L 23/02 |
| | | Polarisation shift keying H04B 14/008 |
| | | Transmission of data during the active part of a television frame H04N 7/025 |

- The table above is used for corrections or modifications to existing definitions, e.g. delete an entire definition or part thereof; propose new wording or modify wording of a section, change the symbol the definition is associated with, change or delete a reference symbol, etc.
- Do not delete (F) symbol definitions.

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3. REVISION CONCORDANCE LIST (RCL)

| Type* | From CPC Symbol (existing) | To CPC Symbol(s) |
|-------|----------------------------|---|
| D | H04L 12/4011 | < administrative transfer to H04L 12/40052> |

^{*} 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.

- 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* |
|--------------|------------|---------|
| H04L 12/4011 | | DELETE |

*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".

- 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 desired.