EUROPEAN PATENT OFFICE U.S. PATENT AND TRADEMARK OFFICE

CPC NOTICE OF CHANGES 1692

DATE: JANUARY 1, 2025

PROJECT MP12364

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

| <u>Action</u> | <u>Subclass</u> | Group(s) |
|-----------------------|-----------------|-------------------------------------|
| | | |
| SCHEME: | | |
| Titles Changed: | H03H | SUBCLASS |
| _ | Н03Н | 1/02 |
| | H03H | 7/00,7/12,7/13,7/46 |
| | H03H | 9/00,9/05,9/13,9/54 |
| | Н03Н | 11/14, 11/26, 11/34, 11/44 |
| | | |
| DEFINITIONS: | | |
| Definitions Modified: | Н03Н | SUBCLASS |
| | Н03Н | 1/00, 3/00, 5/00, 7/00, 9/00, 11/00 |
| Definitions New: | Н03Н | 1/02,7/12,7/46,11/26,11/34,11/44 |

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 | TCATION SCHEME CHANGES |
|--------|-------------|--|
| | \boxtimes | 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. DEF | INIT | TIONS |
| | \boxtimes | A. New or Modified Definitions (Full definition template) |
| | | B. Modified or Deleted Definitions (Definitions Quick Fix) |
| 3. 🗌 | REV | TISION CONCORDANCE LIST(RCL) |
| 4. 🗌 | CHA | ANGES TO THE CPC-TO-IPC CONCORDANCE LIST (CICL) |
| 5. 🗌 | CHA | ANGES TO THE CROSS-REFERENCE LIST (CRL) |

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1. CLASSIFICATION SCHEME CHANGES

A. New, Modified or Deleted Group(s)

$SUBCLASS\,H03H\,-\,IMPEDANCE\,NETWORKS, e.\,g.\,RESONANT\,CIRCUITS; RESONATORS$

| Type* | Symbol | Indent Level Number of dots (e.g. 0, 1, 2) | <u>Title</u> "CPC only" text should normally be enclosed in {curly brackets}** | Transferred to# |
|-------|-----------|--|---|-----------------|
| М | Н03Н | Subclass | IMPEDANCE NETWORKS, e.g. RESONANT CIRCUITS; RESONATORS (waveguides, resonators, lines or other devices of the waveguide type H01P) | |
| M | H03H1/02 | 1 | RC networks, e.g. filters | |
| M | H03H7/00 | 0 | Multiple-port networks comprising only passive electrical elements as network components | |
| M | H03H7/12 | 2 | Bandpass or bandstop filters with adjustable bandwidth and fixed centre frequency (H03H7/09 takes precedence) | |
| M | H03H7/13 | 2 | using electro-optical elements | |
| M | Н03Н7/46 | 1 | Networks for connecting several sources or loads, working on different frequencies or frequency bands, to a common load or source | |
| M | Н03Н9/00 | 0 | Networks comprising electromechanical or electro-acoustic elements; Electromechanical resonators (electro-acoustic transducers such as loudspeakers, microphones or gramophone pick-ups H04R; piezoelectric, electrostrictive or magnetostrictive devices with mechanical input or output, e.g. actuators or sensors, H10N30/00, H10N35/00) | |
| M | H03H9/05 | 2 | Holders or supports | |
| M | H03H9/13 | 3 | for networks consisting of piezoelectric or electrostrictive materials (for networks using surface a coustic waves H03H9/145) | |
| M | H03H9/54 | 2 | comprising resonators of piezoelectric or electrostrictive material (comprising resonators using surface acoustic waves H03H 9/64) | |
| M | H03H11/14 | 3 | using electro-optical devices | |
| M | H03H11/26 | 2 | Time-delay networks | |
| M | H03H11/34 | 2 | Networks for connecting several sources or loads working on different frequencies or frequency bands, to a common load or source | |

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| M | H03H11/44 | 3 | Negative impedance converters (H03H | |
|---|-----------|---|-------------------------------------|--|
| | | | 11/42 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.

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.

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2. A. DEFINITIONS (new)

H03H 1/02

References

Informative references

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

| Structural combinations of capacitors with other electric | H01G |
|---|------|
| elements | |

H03H 7/12

References

Limiting references

This place does not cover:

| Filters comprising mutual inductance | H03H 7/09 |
|--------------------------------------|-----------|
|--------------------------------------|-----------|

Informative references

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

| Automatic control of bandwidth in amplifiers | H03G 5/16 |
|--|-----------|
|--|-----------|

H03H 7/46

Application-oriented references

Examples of places where the subject matter of this place is covered when specially adapted, used for a particular purpose, or incorporated in a larger system:

| For use in multiplex transmission systems | H04J1/00 |
|---|----------|
|---|----------|

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H03H 11/26

References

Informative references

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

| Analogue shift registers | G11C 27/04 |
|-----------------------------|-------------------|
| 7 thatogas of the registers | O 1 1 O E 1 / O 1 |

H03H 11/34

References

Application-oriented references

Examples of places where the subject matter of this place is covered when specially adapted, used for a particular purpose, or incorporated in a larger system:

| For use in multiplex transmission systems | H04J 1/00 |
|---|-----------|
| | |

H03H 11/44

References

Limiting references

This place does not cover:

| G | yrators | H03H 11/42 |
|---|---------|------------|

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Application-oriented references

Examples of places where the subject matter of this place is covered when specially adapted, used for a particular purpose, or incorporated in a larger system:

| Negative impedance converters used in frequency- | H03H 11/10 |
|--|------------|
| selective networks | |

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2. A. DEFINITIONS (modified)

H03H

References

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

Limiting references

This place does not cover:

| Waveguides, resonators, lines or other devices of | f the waveguide | H01P |
|---|-----------------|------|
| type | | |

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

Informative references

| Arrangements for producing a reverberation or echo sound | G10K 15/08 |
|--|------------|
| Measuring or testing | G01 |
| Resistors | H01C |
| Magnets, inductances, transformers | H01F |
| Capacitors, rectifiers, detectors, switching devices or light- sensitive devices of the electrolytic type | H01G |
| Impedance matching in integrated circuits | H01L |
| Active filters for AC distribution networks (mostly using chopping of the power wave with power semiconductors), FACTS | H02J, H02M |
| Impedance matching for amplifiers | H03F |
| Control of amplification, e.g. bandwidth control of amplifiers | H03G |

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| Tuning resonant circuits, e.g. tuning coupled resonant circuits | H03J |
|---|--------------|
| Networks for modifying the frequency characteristics of communication systems | H04B |
| Arrangements for coupling to transmission lines | H04L 25/0264 |

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

H03H 1/00

References

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

Limiting references

This place does not cover:

| Constructional details of electromechanical transducers | H03H 9/00 |
|---|-----------|
|---|-----------|

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:

| Multilayered microwave filters including exclusively distributed | H01P |
|--|------|
| elements like microstrip or transmission lines | |

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

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H03H 3/00

References

Delete: The entire Limiting references section.

<u>Insert</u>: 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:

| Manufacture of transducers not involving resonance (e.g. ink | H10N 30/00 |
|--|------------|
| dispatchers for printers) | |

H03H5/00

References

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

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

Informative references

| Resistors | H01C |
|---|---------------|
| Magnets; Inductances; Transformers | H01F |
| Capacitors | H01G |
| Oscillators | H03B 5/00 |
| Simulation of reactances (e.g. active inductors, capacitor multipliers) | H03H 11/48 |
| with active elements | and subgroups |

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H03H 7/00

References

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

<u>Insert</u>: The following new Application-oriented references section.

Application-oriented references

Examples of places where the subject matter of this place is covered when specially adapted, used for a particular purpose, or incorporated in a larger system:

| Receiver input circuits, e.g. for coupling to an antenna or a | H04B 1/18 |
|---|-----------|
| transmission line | |
| Networks simulating a length of communication cable | H04B 3/40 |

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

Informative references

| Simple balanced/unbalanced networks consisting only of coupled | H01F |
|---|-------------|
| inductances (e.g. transformers) | |
| Circulators, isolators with passive distributed elements | H01P |
| | 1/36,H01P |
| | 1/38 |
| Balanced/unbalanced networks having lumped and distributed | H01P 5/10 |
| passive elements | |
| Hybrid couplers with passive distributed elements | H01P 5/16 |
| Passive filters for power distribution networks | H02J, H02M |
| Attenuators for telecom transmission lines (phone, etc.) | H03B 5/00 |
| Filters in audio frequency spectrum or in the sense of gain | H03G |
| controlling | |
| Attenuators in audio frequency spectrum or in the sense of gain | H03G 1/0058 |
| controlling | |
| RF interference and EMI filters | H03H 1/00 |
| Hybrid couplers with passive lumped elements | H03H 7/48 |
| Circulators, isolators with passive lumped elements | H03H 7/52 |

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| Receiver input or transceiver output circuits for automatic | H04B 1/0458 |
|---|--------------|
| impedance matching in telecommunications | |
| Arrangements for coupling to transmission lines | H04L 25/0264 |
| CATV (power) splitters | H04N |
| Bandpass or bandstop filters for TV | H04N 5/60 |
| In PCB embedded R, L, C elements for filtering | H05K |
| Manufacture/packaging of multilayer RLC filters | H05K |

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

H03H 9/00

References

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

Limiting references

This place does not cover:

| Piezoelectric, electrostrictive magnetostrictive devices with | H10N 30/00, |
|---|-------------|
| mechanical input or output, e.g. actuators or sensors | H10N 35/00 |
| Electro-acoustic transducers such as loudspeakers, microphones or | H04R |
| gramophone pick-ups | |

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

Informative references

| MEMS transducers not involving resonance | B81B - B81C |
|--|---------------|
| Mirror of BAW devices - manufacture | C23C |
| SAW/MEMS/BAW devices for sensing applications (when no | G01N 29/00 |
| particular emphasis is made for the constructional details or filtering, | |
| and focus is on sensing) | |
| RF ID tags | G01S13/755, |
| | G06K 7/10009, |
| | H03H 9/42 |

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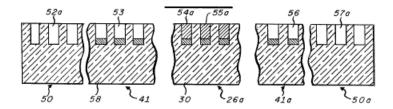
| SAW tuning | H03H 9/02968, |
|--|---------------|
| | H03H 9/6403 |
| Constructional details involving semiconductor parts (e.g. layers, | H01L |
| package, etc.) | |

<u>Delete</u>: The following from the Special rules section.

US3886503

H03H 9/02653

The grooves could be empty, partially or totally filled with material, and they could be between (but not inside) IDTs or side-framing them. When they are inside the IDTs, H03H9/02S6G1 should be allocated.



H03H 11/00

References

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

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

Informative references

| Integrators, per se | G06F 7/00 |
|--|---------------|
| Audio equalizers | H03G 5/00 |
| Current converters CCII+, nullor, nulator, rotator | H03H 11/02 |
| Log-domain filters | H03H 11/0405 |
| Controller resistors | H03H 11/24 |
| | and subgroups |

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| Circulators, isolators with active elements | H03H11/38 |
|---|---------------|
| Simulation of reactances with applications in amplifiers | H03F1/56 and |
| | subgroups |
| Simulating reactances in tuning context | H03J3/18 and |
| | subgroups |
| Time delay networks, esp. built with boolean ports or digital | H03K5/13 and |
| registers | subgroups |
| Impedance matching having switching elements or registers | H03K |
| | 19/017545, |
| | H03K |
| | 19/01825 and |
| | H03K |
| | 19/018557 and |
| | subgroups |
| Impedance matching for high speed lines | H04L 25/0278 |

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

<u>Replace</u>: The existing Synonyms and Keywords section with the following updated section.

Synonyms and Keywords

In patent documents, the following words/expressions are often used with the meaning indicated:

| active inductor inductor simulation/emulation/synthesis; inductorless |
|---|
|---|