EUROPEAN PATENT OFFICE
U.S. PATENT AND TRADEMARK OFFICE

CPC NOTICE OF CHANGES 1617

DATE: MAY 1, 2024

PROJECT RP11780

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

Action	**Subclass**	**Group(s)**
SCHEME:		
Symbols Deleted:	H10N	30/1051, 30/10513, 30/10516, 30/1061, 30/1071
Symbols New:	H10N	30/101, 30/702, 30/704, 30/706, 30/708
Titles Changed:	H10N	15/15
	H10N	30/501, 30/503, 30/505, 30/506, 30/802, 30/804, 30/8548, 30/8554, 30/8561, 30/872, 30/877, 30/883, 30/886
	H10N	60/0156, 60/0296, 60/0352, 60/0381, 60/0521, 60/0548, 60/0661, 60/0716, 60/0744, 60/0772, 60/0801, 60/0884, 60/11, 60/851, 60/853, 60/855, 60/858
	H10N	70/021, 70/041, 70/061, 70/253, 70/257, 70/8265, 70/884
	H10N	89/02
	H10N	99/03, 99/05

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 H10N - ELECTRIC SOLID-STATE DEVICES NOT OTHERWISE PROVIDED FOR

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#**
M	H10N 15/15	2	{Thermoelectric active materials}	
U	H10N 30/098	3	Forming organic materials	
N	H10N 30/101	1	{with electrical and mechanical input and output, e.g. having combined actuator and sensor parts}	
D	H10N30/1051	1	{based on piezoelectric or electrostrictive films or coatings}	<administrative transfer to H10N 30/704>
D	H10N30/10513	2	{characterised by the underlying bases, e.g. substrates}	<administrative transfer to H10N 30/706>
D	H10N30/10516	3	{Intermediate layers, e.g. barrier, adhesion or growth control buffer layers}	<administrative transfer to H10N 30/708>
D	H10N30/1061	1	{based on piezoelectric or electrostrictive fibres}	<administrative transfer to H10N 30/702>
D	H10N30/1071	1	{with electrical and mechanical input and output, e.g. having combined actuator and sensor parts}	<administrative transfer to H10N 30/101>
M	H10N30/501	2	{having a non-rectangular cross-section in a plane parallel to the stacking direction, e.g. polygonal or trapezoidal in side view}	
M	H10N30/503	2	{having a non-rectangular cross-section in a plane orthogonal to the stacking direction, e.g. polygonal or circular in top view}	
M	H10N30/505	3	{the cross-section being annular}	
M	H10N30/506	2	{having a cylindrical shape and having stacking in the radial direction, e.g. coaxial or spiral type rolls}	

U	H10N 30/60	1	having a coaxial cable structure	
N	H10N 30/702	1	{based on piezoelectric or electrostrictive fibres}	
N	H10N 30/704	1	{based on piezoelectric or electrostrictive films or coatings}	
N	H10N 30/706	2	{characterised by the underlying bases, e.g. substrates}	
N	H10N 30/708	3	{Intermediate layers, e.g. barrier, adhesion or growth control buffer layers}	
M	H10N30/802	2	{Circuitry or processes for operating piezoelectric or electrostrictive devices not otherwise provided for, e.g. drive circuits}	
M	H10N30/804	3	{for piezoelectric transformers}	
M	H10N30/8548	4	{Lead-based oxides}	
M	H10N30/8554	5	{Lead-zirconium titanate [PZT] based}	
M	H10N30/8561	4	{Bismuth-based oxides}	
M	H10N30/872	3	{Interconnections, e.g. connection electrodes of multilayer piezoelectric or electrostrictive devices}	
M	H10N30/877	3	{Conductive materials}	
M	H10N30/883	3	{Additional insulation means preventing electrical, physical or chemical damage, e.g. protective coatings}	
M	H10N30/886	3	{Additional mechanical prestressing means, e.g. springs}	
M	H10N60/0156	2	{of devices comprising Nb or an alloy of Nb with one or more of the elements of group IVB, e.g. titanium, zirconium or hafnium}	
M	H10N60/0296	3	{Processes for depositing or forming copper oxide superconductor layers}	
M	H10N60/0352	4	{from a suspension or slurry, e.g. screen printing or doctor blade casting}	
M	H10N60/0381	4	{by evaporation, e.g. MBE}	
M	H10N60/0521	4	{by pulsed laser deposition, e.g. laser sputtering}	

M	H10N60/0548	4	{by deposition and subsequent treatment, e.g. oxidation of pre-deposited material}	
M	H10N60/0661	3	{Processes performed after copper oxide formation, e.g. patterning}	
M	H10N60/0716	4	{Passivating}	
M	H10N60/0744	3	{Manufacture or deposition of electrodes}	
M	H10N60/0772	3	{Processes including the use of non-gaseous precursors}	
M	H10N60/0801	3	{Manufacture or treatment of filaments or composite wires}	
M	H10N60/0884	2	{Treatment of superconductor layers by irradiation, e.g. ion-beam, electron-beam, laser beam or X-rays}	
M	H10N60/11	2	{Single-electron tunnelling devices}	
M	H10N60/851	3	{Organic superconductors}	
M	H10N60/853	4	{Fullerene superconductors, e.g. soccer ball-shaped allotropes of carbon, e.g. C_{60} or C_{94}}	
M	H10N60/855	3	{Ceramic superconductors}	
M	H10N60/858	5	{having multilayered structures, e.g. superlattices}	
M	H10N70/021	2	{Formation of switching materials, e.g. deposition of layers}	
M	H10N70/041	2	{Modification of switching materials after formation, e.g. doping (shaping H10N 70/061)}	
M	H10N70/061	2	{Shaping switching materials}	
M	H10N70/253	2	{having three or more electrodes, e.g. transistor-like devices}	
M	H10N70/257	2	{having switching assisted by radiation or particle beam, e.g. optically controlled devices}	
M	H10N 70/8265	4	{on sidewalls of dielectric structures, e.g. mesa-shaped or cup-shaped devices}	
M	H10N70/884	3	{based on at least one element of group IIIA, IVA or VA, e.g. elemental or compound semiconductors (compounds of sulfur, selenium or tellurium, e.g. chalcogenides H10N	

			70/882; oxides or nitrides H10N 70/883)}	
M	H10N89/02	1	{Gunn-effect integrated devices}	
M	H10N99/03	1	{Devices using Mott metal-insulator transition, e.g. field-effect transistor-like devices}	
M	H10N99/05	1	{Devices based on quantum mechanical effects, e.g. quantum interference devices or metal single-electron transistors}	

*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.

3. REVISION CONCORDANCE LIST (RCL)

Type*	**From CPC Symbol (existing)**	**To CPC Symbol(s)**
D	H10N 30/1051	<administrative transfer to H10N 30/704>
D	H10N 30/10513	<administrative transfer to H10N 30/706>
D	H10N 30/10516	<administrative transfer to H10N 30/708>
D	H10N 30/1061	<administrative transfer to H10N 30/702>
D	H10N 30/1071	<administrative transfer to H10N 30/101>

* 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.

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

CPC	**IPC**	**Action***
H10N 30/101	H10N 30/00	NEW
H10N 30/1051		DELETE
H10N 30/10513		DELETE
H10N 30/10516		DELETE
H10N 30/1061		DELETE
H10N 30/1071		DELETE
H10N 30/702	H10N 30/00	NEW
H10N 30/704	H10N 30/00	NEW
H10N 30/706	H10N 30/00	NEW
H10N 30/708	H10N 30/00	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 <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.