EUROPEAN PATENT OFFICE U.S. PATENT AND TRADEMARK OFFICE

CPC NOTICE OF CHANGES 1624

DATE: MAY 1, 2024

PROJECT RP10464-F

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

Action	<u>Subclass</u>	Group(s)
COMPAGE		
SCHEME:		
Symbols Deleted:	H01L	21/2018, 21/2022, 21/2026, 21/203,
		21/2033, 21/2036, 21/205, 21/2053,
		21/2056, 21/208, 21/2085
Warnings Deleted:	H01L	21/20, 21/02365, 21/2018, 21/2022,
		21/2026, 21/203, 21/2033, 21/2036,
		21/205, 21/2053, 21/2056, 21/208,
		21/2085
Warnings Modified:	H01L	SUBCLASS
DEFINITIONS:		
Definitions Deleted:	H01L	21/20
(no frozen (F) symbol definitions		
should be deleted)		
Definitions Modified:	H01L	27/1274

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

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

1. CL	ASSIF	FICATION SCHEME CHANGES
	\boxtimes	A. New, Modified or Deleted Group(s)
	\boxtimes	B. New, Modified or Deleted Warning(s)
		C. New, Modified or Deleted Note(s)
		D. New, Modified or Deleted Guidance Heading(s)
2. DEI	FINIT	TONS
		A. New or Modified Definitions (Full definition template)
	\boxtimes	B. Modified or Deleted Definitions (Definitions Quick Fix)
3. 🗌	REV	TSION 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 H01L - SEMICONDUCTOR DEVICES NOT COVERED BY CLASS H10 (use of semiconductor devices for measuring G01; resistors in general H01C; magnets, inductors or transformers H01F; capacitors in general H01G; electrolytic devices H01G 9/00; batteries or accumulators H01M; waveguides, resonators or lines of the waveguide type H01P; line connectors or current collectors H01R; stimulated-emission devices H01S; electromechanical resonators H03H; loudspeakers, microphones, gramophone pick-ups or like acoustic electromechanical transducers H04R; electric light sources in general H05B; printed circuits, hybrid circuits, casings or constructional details of electrical apparatus, manufacture of assemblages of electrical components H05K; use of semiconductor devices in circuits having a particular application, see the subclass for the application)

Type*	Symbol	Indent Level Number of dots (e.g. 0, 1,	Title "CPC only" text should normally be enclosed in {curly brackets}**	Transferred to#
D	H01L 21/2018	<u>2)</u> 5	{Selective epila xial growth, e.g. simultaneous deposition of mono - and non-mono semiconductor materials}	<no transfer=""></no>
D	H01L 21/2022	5	{Epitaxial regrowth of non-monocrystalline semiconductor materials, e.g. lateral epitaxy by seeded solidification, solid-state crystallization, solid-state graphoepitaxy, explosive crystallization, grain growth in polycrystalline materials}	<no transfer=""></no>
D	H01L 21/2026	6	{using a coherent energy beam, e.g. laser or electron beam}	<no transfer=""></no>
D	H01L 21/203	5	using physical deposition, e.g. vacuum deposition, sputtering	<no transfer=""></no>
D	H01L 21/2033	6	{Epitaxial deposition of elements of Group IV of the Periodic System, e.g. Si, Ge}	<no transfer=""></no>
D	H01L 21/2036	6	{Epitaxial deposition of AIII BV compounds}	<no transfer=""></no>
D	H01L 21/205	5	using reduction or decomposition of a gaseous compound yielding a solid condensate, i.e. chemical deposition	<no transfer=""></no>
D	H01L 21/2053	6	{Expita xial deposition of elements of Group IV of the Periodic System, e.g. Si, Ge}	<no transfer=""></no>
D	H01L 21/2056	6	{Epitaxial deposition of A _{III} B _V compounds}	<no transfer=""></no>
D	H01L 21/208	5	using liquid deposition	<no transfer=""></no>
D	H01L 21/2085	6	$\{EpitaxialdepositionofA_{III}B_{V}compounds\}$	<no transfer=""></no>

^{*}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

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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.
- 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 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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B. New, Modified or Deleted Warning(s)

$SUBCLASS\,H01L\,-SEMICONDUCTOR\,DEVICES; ELECTRIC\,SOLID\,STATE\,DEVICES\,NOT\,OTHERWISE\,PROVIDED\,FOR$

M H01L 1. The following IPC groups are not in the CPC scheme. The subject matter for these IPC groups is classified in the following CPC groups: H01L21/301 covered by H01L21/328 covered by H01L21/328 covered by H01L21/329 covered by H01L21/329 covered by H01L21/33 covered by H01L21/33 covered by H01L21/33 covered by H01L21/331 covered by H01L21/331 covered by H01L21/328 covered by H01L21/331 covered by H01L21/338	
H01L21/301 covered by H01L21/30 H01L21/328 covered by H01L29/66075 H01L21/329 covered by H01L21/329 covered by H01L21/33 covered by H01L21/33 covered by H01L21/331 covered by H01L21/328 covered by H01l	ne. The ese IPC n the
H01L21/328 covered by H01L29/66075 H01L21/329 covered by H01L29/66083 H01L21/33 covered by H01L21/301 covered by H01l H01L29/66227 H01L21/331 covered by H01L21/328 covered by H01l	L 21/02631
H01L21/329 covered by H01L29/66083 H01L21/33 covered by H01L29/66227 H01L21/331 covered by H01L21/328 covered by H01L	L 21/0262
H01L 29/66227 H01L21/331 covered by H01L21/328 covered by H01l	L 21/02623
H01L 29/66234	
H01L21/332 covered by H01L21/329 covered by H01l H01L29/66363	
H01L21/334 covered by H01L21/33 covered by H01L H01L29/66075	
H01L21/335 covered by H01L29/66409 H01L21/331 covered by H01L	
H01L21/336 covered by H01L29/66477 H01L21/337 covered by H01L21/334 covered by H01L	
H01L21/337 Covered by H01L21/334 Covered by H01L H01L29/66893 H01L21/338 covered by H01L21/335 covered by H01l	
H01L29/66848 H01L21/339 covered by H01L21/336 covered by H01l	
H01L29/66946 H01L21/36-H01L21/368 covered H01L21/337 covered by H01l	
by H01L21/02107 H01L21/58 covered by H01L21/338 covered by H01l	
H01L 24/80 H01L21/66 covered by H01L21/339 covered by H01l	L 29/66946
H01L 22/00 H01L21/98 covered by H01L21/36 - H01L21/368 cov H01L 25/50 H01L 21/02107	vered by
H01L29/38 covered by H01L29/04-H01L H01L21/58 covered by H01L 29/365	24/80
H01L29/96 covered by H01L21/66 covered by H01L H01L29/68-H01L	22/00
29/945 2. {In this subclass non-limiting references (in the	25/50

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Type*	Location	Old Warning	New/Modified Warning
		sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.}	H01L29/38 covered by H01L29/04-H01L29/365 H01L29/96 covered by H01L29/68-H01L29/945 2. {In this subclass non-limiting references (in the sense of para graph 39 of the Guide to the IPC) may still be displayed in the scheme.}
D	H01L21/02365	1. Group H01L 21/02365 is incomplete pending reclassification of documents from groups H01L 21/06, H01L 21/16 and H01L 21/20. Groups H01L 21/06, H01L 21/16 and H01L 21/20 should be considered in order to perform a complete search. 2. Groups H01L 21/02365 - H01L 21/02694 are incomplete pending reclassification of documents from groups H01L 21/2018, H01L 21/2022, H01L 21/2033, H01L 21/2033, H01L 21/2033, H01L 21/2053, H01L 21/2055, H01L 21/2053, H01L 21/2055, H01L 21/208 and H01L 21/2085. All groups listed in this Warning should be considered in order to perform a complete search.	Delete the entire warning
D	H01L21/20	Group H01L21/20 is impacted by reclassification into groups H01L 21/02365 – H01L21/02694. Groups H01L21/20 and H01L 21/02365 – H01L21/02694 should be considered in order to perform a complete search.	Delete the entire warning
D	H01L21/2018	Group H01L21/2018 is no longer used for the classification of documents as of August 1, 2022. The content of this group is being reclassified into groups H01L 21/02365 - H01L 21/2018 and H01L 21/02365 - H01L 21/20694 should	Delete the entire warning

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Type*	Location	Old Warning	New/Modified Warning
		be considered in order to perform a complete search.	
D	H01L 21/2022	Group H01L21/2022 is no longer used for the classification of documents as of August 1, 2022. The content of this group is being reclassified into groups H01L 21/02365 - H01L 21/02694. Groups H01L 21/2022 and H01L 21/02365 - H01L 21/02694 should be considered in order to perform a complete search.	Delete the entire warning
D	H01L21/2026	Group H01L21/2026 is no longer used for the classification of documents as of August 1, 2022. The content of this group is being reclassified into groups H01L 21/02365 - H01L21/02694. Groups H01L21/2026 and H01L21/02365 - H01L21/02694 should be considered in order to perform a complete search.	Delete the entire warning
D	H01L21/203	Group H01L21/203 is no longer used for the classification of documents as of August 1, 2022. The content of this group is being reclassified into groups H01L 21/02365 - H01L 21/02694. Groups H01L 21/02365 - H01L 21/02694 should be considered in order to perform a complete search.	Delete the entire warning
D	H01L21/2033	Group H01L21/2033 is no longer used for the classification of documents as of August 1, 2022. The content of this group is being reclassified into groups H01L 21/02365 - H01L 21/02694. Groups H01L 21/2033 and H01L 21/02365 - H01L 21/02694 should be considered in order to perform a complete search.	Delete the entire warning
D	H01L21/2036	Group H01L21/2036 is no longer used for the classification of documents as of August 1, 2022. The content of this group is being reclassified into groups H01L	Delete the entire warning

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Type*	Location	Old Warning	New/Modified Warning
		21/02365 - H01L 21/02694. Groups H01L 21/2036 and H01L 21/02365 - H01L 21/02694 should be considered in order to perform a complete search.	
D	H01L21/205	Group H01L21/205 is no longer used for the classification of documents as of August 1, 2022. The content of this group is being reclassified into groups H01L 21/02365 - H01L21/02694. Groups H01L21/205 and H01L 21/02365 - H01L21/02694 should be considered in order to perform a complete search.	Delete the entire warning
D	H01L21/2053	Group H01L21/2053 is no longer used for the classification of documents as of August 1, 2022. The content of this group is being reclassified into groups H01L 21/02365 - H01L21/02694. Groups H01L21/2053 and H01L21/02365 - H01L21/02694 should be considered in order to perform a complete search.	Delete the entire warning
D	H01L21/2056	Group H01L21/2056 is no longer used for the classification of documents as of August 1, 2022. The content of this group is being reclassified into groups H01L 21/02365 - H01L21/02694. Groups H01L21/2056 and H01L21/02365 - H01L21/02694 should be considered in order to perform a complete search.	Delete the entire warning
D	H01L21/208	Group H01L21/208 is no longer used for the classification of documents as of August 1, 2022. The content of this group is being reclassified into groups H01L 21/02365 - H01L21/02694. Groups H01L21/208 and H01L21/02365 - H01L21/02694 should be considered in order to perform a complete search.	Delete the entire warning
D	H01L21/2085	Group H01L21/2085 is no longer used for the classification of	Delete the entire warning

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Type*	Location	Old Warning	New/Modified Warning
		documents as of August 1, 2022. The content of this group is being reclassified into groups H01L 21/02365 - H01L 21/02694. Groups H01L 21/2085 and H01L 21/02365 - H01L 21/02694 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. B. DEFINITIONS QUICK FIX

Symbol	Location of change	Existing reference symbol or text	Action; New symbol; New text
	(e.g., section title)		
H01L21/20			Delete entire definition
H01L27/1274	Informative		Delete H01L21/2022
	references		

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

CPC	<u>IPC</u>	Action*
H01L 21/2018		DELETE
H01L 21/2022		DELETE
H01L 21/2026		DELETE
H01L 21/203		DELETE
H01L 21/2033		DELETE
H01L 21/2036		DELETE
H01L 21/205		DELETE
H01L 21/2053		DELETE
H01L21/2056		DELETE
H01L 21/208		DELETE
H01L 21/2085		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".

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.