

EUROPEAN PATENT OFFICE  
U.S. PATENT AND TRADEMARK OFFICE

CPC NOTICE OF CHANGES 1409

DATE: FEBRUARY 1, 2023

PROJECT RP11944

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

<u>Action</u>	<u>Subclass</u>	<u>Group(s)</u>
<b>SCHEME:</b>		
Symbols Deleted:	H01L	25/046, 25/047, 25/048
Titles Changed:	H01L	25/03, 25/16, 25/18
Warnings New:	H01L	25/04, 25/065, 25/0652, 25/0655, 25/0657, 25/16, 25/18
Notes New:	H01L	25/00
<b>DEFINITIONS:</b>		
Definitions Deleted: (no frozen (F) symbol definitions should be deleted)	H01L	25/047, 25/048

**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 H01L – SEMICONDUCTOR DEVICES NOT COVERED BY CLASS H10**

<b>Type*</b>	<b>Symbol</b>	<b>Indent Level Number of dots (e.g. 0, 1, 2)</b>	<b>Title “CPC only” text should normally be enclosed in {curly brackets}**</b>	<b>Transferred to#</b>
M	H01L 25/03	1	all the devices being of a type provided for in the same subgroup of groups H01L27/00 - H01L 33/00, or in a single subclass of H10K, H10N, e.g. assemblies of rectifier diodes	
C	H01L 25/04	2	the devices not having separate containers	H01L 25/04, H10K 19/00, H10K 39/10, H10K 59/90, H10K 59/95, H10K 65/00
D	H01L 25/046	3	{the devices being of a type provided for in group H01L51/00}	<administrative transfer to H10K 19/901>
D	H01L 25/047	4	{the devices being of a type provided for in group H01L51/42, e.g. photovoltaic modules based on organic solar cells }	<administrative transfer to H10K 39/601>
D	H01L 25/048	4	{the devices being of a type provided for in group H01L51/50, e.g. assembly of organic light emitting devices }	<administrative transfer to H10K 59/90>
C	H01L 25/065	3	the devices being of a type provided for in group H01L27/00	H01L 25/065, H10B 80/00
C	H01L 25/0652	4	{the devices being arranged next and on each other, i.e. mixed assemblies }	H01L 25/0652, H10B 80/00
C	H01L 25/0655	4	{the devices being arranged next to each other }	H01L 25/0655, H10B 80/00
C	H01L 25/0657	4	{Stacked arrangements of devices }	H01L 25/0657, H10B 80/00
C	H01L 25/16	1	the devices being of types provided for in two or more different main groups of groups H01L27/00 - H01L 33/00, or in a single subclass of H10K, H10N, e.g. forming hybrid circuits	H01L 25/16, H10B 80/00, H10K 39/10, H10K 59/90, H10K 59/95, H10N 19/00, H10N 39/00, H10N 59/00, H10N 69/00, H10N 79/00, H10N 89/00
C	H01L25/162	2	{the devices being mounted on two or more different substrates }	H01L 25/162, H10B 80/00, H10K 39/10, H10K 59/90, H10K 59/95, H10N 19/00, H10N 39/00, H10N 59/00, H10N 69/00, H10N 79/00, H10N 89/00
C	H01L25/165	2	{Containers }	H01L 25/165, H10B 80/00, H10K 39/10, H10K 59/90, H10K 59/95, H10N 19/00,

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<b>Type*</b>	<b>Symbol</b>	<b>Indent Level Number of dots (e.g. 0, 1, 2)</b>	<b>Title</b> <b>“CPC only” text should normally be enclosed in {curly brackets}**</b>	<b>Transferred to#</b>
				H10N 39/00, H10N 59/00, H10N 69/00, H10N 79/00, H10N 89/00
C	H01L25/167	2	{comprising optoelectronic devices, e.g. LED, photodiodes}	H01L 25/167, H10B 80/00, H10K 39/10, H10K 59/90, H10K 59/95, H10N 19/00, H10N 39/00, H10N 59/00, H10N 69/00, H10N 79/00, H10N 89/00
C	H01L 25/18	1	the devices being of types provided for in two or more different subgroups of the same main group of groups H01L 27/00 - H01L 33/00, or in a single subclass of H10K, H10N	H01L 25/18, H10B 80/00, H10K 19/00, H10K 39/10, H10K 59/90, H10K 59/95, H10K 65/00, H10N 19/00, H10N 39/00, H10N 59/00, H10N 69/00, H10N 79/00, H10N 89/00

\*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 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 NOT COVERED BY CLASS H10**

<u>Type*</u>	<u>Location</u>	<u>Old Warning</u>	<u>New Warning</u>
N	H01L 25/04		Group H01L 25/04 is impacted by reclassification into groups H10K 19/00, H10K 39/10, H10K 59/90, H10K 59/95 and H10K 65/00. All groups listed in this Warning should be considered in order to perform a complete search.
N	H01L 25/065		Group H01L 25/065 is impacted by reclassification into group H10B 80/00. Groups H01L 25/065 and H10B 80/00 should be considered in order to perform a complete search.
N	H01L 25/0652		Group H01L 25/0652 is impacted by reclassification into group H10B 80/00. Groups H01L 25/0652 and H10B 80/00 should be considered in order to perform a complete search.
N	H01L 25/0655		Group H01L 25/0655 is impacted by reclassification into group H10B 80/00. Groups H01L 25/0655 and H10B 80/00 should be considered in order to perform a complete search.
N	H01L 25/0657		Group H01L 25/0657 is impacted by reclassification into group H10B 80/00. Groups H01L 25/0657 and H10B 80/00 should be considered in order to perform a complete search.
N	H01L 25/16		Groups H01L 25/16, H01L25/162, H01L25/165 and H01L25/167 are impacted by reclassification into groups H10B 80/00, H10K 39/10, H10K 59/90, H10K 59/95, H10N 19/00, H10N 39/00, H10N 59/00, H10N 69/00, H10N 79/00 and H10N 89/00. All groups listed in this Warning should be considered in order to perform a complete search.
N	H01L 25/18		Group H01L 25/18 is impacted by reclassification into groups H10B 80/00, H10K 19/00, H10K 39/10, H10K 59/90, H10K 59/95, H10K 65/00, H10N 19/00, H10N 39/00, H10N 59/00, H10N 69/00, H10N 79/00 and H10N 89/00. All groups listed in this Warning should

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<u>Type*</u>	<u>Location</u>	<u>Old Warning</u>	<u>New Warning</u>
			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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C. New, Modified or Deleted Note(s)

**SUBCLASS H01L – SEMICONDUCTOR DEVICES NOT COVERED BY CLASS H10**

<u>Type*</u>	<u>Location</u>	<u>Old Note</u>	<u>New Note</u>
N	H01L 25/00		<p>This group <u>does not cover</u>:</p> <ul style="list-style-type: none"> <li>• assemblies of electronic memory devices only, which are covered by H10B 80/00;</li> <li>• assemblies of organic devices only, which are covered by groups H10K 19/00, H10K 39/00, H10K 59/00 or H10K 65/00;</li> <li>• assemblies of electric solid-state devices only, which are covered by groups H10N 19/00, H10N 39/00, H10N 59/00, H10N 69/00, H10N 79/00 or H10N 89/00.</li> </ul>

\*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. B. DEFINITIONS QUICK FIX

Symbol	Location of change (e.g., section title)	Existing reference symbol or text	Action; New symbol; New text
H01L25/047			Delete the entire Definition.
H01L25/048			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>
C	H01L 25/04	H01L 25/04, H10K 19/00, H10K 39/10, H10K 59/90, H10K 59/95, H10K 65/00
D	H01L 25/046	<administrative transfer to H10K 19/901>
D	H01L 25/047	<administrative transfer to H10K 39/601>
D	H01L 25/048	<administrative transfer to H10K 59/90>
C	H01L 25/065	H01L 25/065, H10B 80/00
C	H01L 25/0652	H01L 25/0652, H10B 80/00
C	H01L 25/0655	H01L 25/0655, H10B 80/00
C	H01L 25/0657	H01L 25/0657, H10B 80/00
C	H01L 25/16	H01L 25/16, H10B 80/00, H10K 39/10, H10K 59/90, H10K 59/95, H10N 19/00, H10N 39/00, H10N 59/00, H10N 69/00, H10N 79/00, H10N 89/00
C	H01L 25/162	H01L 25/162, H10B 80/00, H10K 39/10, H10K 59/90, H10K 59/95, H10N 19/00, H10N 39/00, H10N 59/00, H10N 69/00, H10N 79/00, H10N 89/00
C	H01L 25/165	H01L 25/165, H10B 80/00, H10K 39/10, H10K 59/90, H10K 59/95, H10N 19/00, H10N 39/00, H10N 59/00, H10N 69/00, H10N 79/00, H10N 89/00
C	H01L 25/167	H01L 25/167, H10B 80/00, H10K 39/10, H10K 59/90, H10K 59/95, H10N 19/00, H10N 39/00, H10N 59/00, H10N 69/00, H10N 79/00, H10N 89/00
C	H01L 25/18	H01L 25/18, H10B 80/00, H10K 19/00, H10K 39/10, H10K 59/90, H10K 59/95, H10K 65/00, H10N 19/00, H10N 39/00, H10N 59/00, H10N 69/00, H10N 79/00, H10N 89/00

\* 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>
H01L 25/046		DELETE
H01L 25/047		DELETE
H01L 25/048		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 “CPC ONLY” 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.