

EUROPEAN PATENT OFFICE
U.S. PATENT AND TRADEMARK OFFICE

CPC NOTICE OF CHANGES 517

DATE: JANUARY 1, 2019

PROJECT RP0421

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

<u>Action</u>	<u>Subclass</u>	<u>Group(s)</u>
SCHEME:		
Symbols Deleted Pending Reclassification: (frozen (F))	H01M	12/005
Titles Changed:	H01M	SUBCLASS
	H01M	2/02
	H01M	4/00
	H01M	4/58
	H01M	4/82
	H01M	6/36
	H01M	10/04
	H01M	10/48
	H01M	12/00
	H01M	12/04
	H01M	12/08
Warnings New:	H01G	11/00
	H01M	10/04
	H01M	10/058
	H01M	12/00
	H01M	12/005
Notes New:	H01M	14/00
Notes Modified:	H01M	SUBCLASS
	H01M	12/00
DEFINITIONS:		
Definitions New:	H01M	2/02
	H01M	4/82
	H01M	6/36
	H01M	10/48
	H01M	12/04
	H01M	12/08

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<u>Action</u>	<u>Subclass</u>	<u>Group(s)</u>
Definitions Modified:	H01M	SUBCLASS
	H01M	4/00
	H01M	8/06
	H01M	10/00
	H01M	12/00

The following subclasses/groups are also impacted by this Notice of Changes (indicate subclasses/groups outside of the project scope, such as those listed in the CRL):

C07F, H04R

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 H01M- PROCESSES OR MEANS, e.g. BATTERIES, FOR THE DIRECT CONVERSION OF CHEMICAL INTO ELECTRICAL ENERGY**

<u>Type</u>	<u>Symbol</u>	<u>Indent Level</u> <u>Number of</u> <u>dots (e.g. 0,</u> <u>1, 2)</u>	<u>Title</u> <u>(new or modified)</u> <u>“CPC only” text should normally be</u> <u>enclosed in {curly brackets}**</u>	<u>Transferred to#</u>
M	H01M	SUBCLASS	PROCESSES OR MEANS, e.g. BATTERIES, FOR THE DIRECT CONVERSION OF CHEMICAL ENERGY INTO ELECTRICAL ENERGY	
M	H01M 2/02	1	Cases, jackets or wrappings	
M	H01M4/00		Electrodes	
M	H01M 4/58	3	of inorganic compounds other than oxides or hydroxides, e.g. sulfides, selenides, tellurides, halogenides or LiCoF _y ; of polyanionic structures, e.g. phosphates, silicates or borates	
M	H01M 4/82	3	Multi-step processes for manufacturing carriers for lead-acid accumulators	
M	H01M 6/36	2	containing electrolyte and made operational by physical means, e.g. thermal cells	
C	H01M 10/04	1	Construction or manufacture in general (H01M 10/058, H01M 10/12, H01M 10/28, H01M 10/38 take precedence)	H01M 10/04 H01M 10/058
E	H01M 10/058	2	Construction or manufacture	
M	H01M 10/48	2	Accumulators combined with arrangements for measuring, testing or indicating condition, e.g. level or density of the electrolyte	
C	H01M 12/00	0	Hybrid cells; Manufacture thereof (hybrid capacitors H01G 11/00)	H01M 12/00, H01G11/00, H01G11/02, H01G11/04, H01G11/06, H01G11/08, H01G11/10, H01G11/12, H01G11/14, H01G11/16, H01G11/18, H01G11/20, H01G11/22, H01G11/24, H01G11/26, H01G11/28, H01G11/30, H01G11/32, H01G11/34, H01G11/36, H01G11/38, H01G11/40, H01G11/42, H01G11/44, H01G11/46, H01G11/48, H01G11/50, H01G11/52,

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<u>Type</u>	<u>Symbol</u>	<u>Indent Level</u> <u>Number of dots (e.g. 0, 1, 2)</u>	<u>Title</u> <u>(new or modified)</u> <u>“CPC only” text should normally be enclosed in {curly brackets}**</u>	<u>Transferred to#</u>
				H01G11/54, H01G11/56, H01G11/58, H01G11/60, H01G11/62, H01G11/64, H01G11/66, H01G11/68, H01G11/70, H01G11/72, H01G11/74, H01G11/76, H01G11/78, H01G11/80, H01G11/82, H01G11/84, H01G11/86
F	H01M12/005	1		H01G11/00, H01G11/02, H01G11/04, H01G11/06, H01G11/08, H01G11/10, H01G11/12, H01G11/14, H01G11/16, H01G11/18, H01G11/20, H01G11/22, H01G11/24, H01G11/26, H01G11/28, H01G11/30, H01G11/32, H01G11/34, H01G11/36, H01G11/38, H01G11/40, H01G11/42, H01G11/44, H01G11/46, H01G11/48, H01G11/50, H01G11/52, H01G11/54, H01G11/56, H01G11/58, H01G11/60, H01G11/62, H01G11/64, H01G11/66, H01G11/68, H01G11/70, H01G11/72, H01G11/74, H01G11/76, H01G11/78, H01G11/80, H01G11/82, H01G11/84, H01G11/86
M	H01M 12/04	1	composed of a half-cell of the fuel-cell type and of a half-cell of the primary-cell type	
M	H01M 12/08	1	composed of a half-cell of a fuel-cell type and a half-cell of the secondary-cell type	

*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; E= 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).

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- For U groups, the minimum requirement is to include the U group located immediately prior to the N group or N group array, in order to show the N group hierarchy and improve the readability and understanding of the scheme. 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 except “D” which requires only a symbol.
- #“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>” or “<administrative transfer to XX and YY simultaneously>” when administrative transfer of the same documents is to more than one place.
- Administrative transfer to main trunk groups is assumed to be “invention information”, unless otherwise indicated, and to 2000 series groups is assumed to be “additional information”.

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

SUBCLASS H01M- PROCESSES OR MEANS, e.g. BATTERIES, FOR THE DIRECT CONVERSION OF CHEMICAL INTO ELECTRICAL ENERGY

<u>Type</u>	<u>Location</u>	<u>Old Warning notice</u>	<u>New/Modified Warning notice</u>
N	H01G 11/00		Groups H01G11/00-H01G11/86 are incomplete pending reclassification of documents from groups H01M 12/00 and H01M12/005. All groups listed in this Warning should be considered in order to perform a complete search.
N	H01M10/04		Group H01M 10/04 is impacted by reclassification into group H01M 10/058. Groups H01M 10/04 and H01M 10/058 should be considered in order to perform a complete search.
N	H01M10/058		Group H01M 10/058 is incomplete pending reclassification of documents from group H01M 10/04. Groups H01M 10/04 and H01M 10/058 should be considered in order to perform a complete search.
N	H01M 12/00		Group H01M 12/00 is impacted by reclassification into groups H01G 11/00 – H01G11/86 . All groups listed in this Warning should be considered in order to perform a complete search.
N	H01M12/005		Group H01M 12/005 is no longer used for the classification of documents as of January 1, 2019. The content of this group is being reclassified into groups H01G11/00-H01G11/86. All groups listed in this Warning 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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C. New, Modified or Deleted Note(s)**SUBCLASS H01M- PROCESSES OR MEANS, e.g. BATTERIES, FOR THE DIRECT CONVERSION OF CHEMICAL INTO ELECTRICAL ENERGY**

<u>Type</u>	<u>Location</u>	<u>Old Note</u>	<u>New/Modified Note</u>
M	H01M	This subclass <u>covers</u> galvanic primary or secondary cells or batteries, fuel cells or batteries.	This subclass <u>covers</u> galvanic primary or secondary cells or batteries, fuel cells or stacks.
M	H01M 12/00	Hybrid cells are electrochemical generators having two different types of half-cells, the half-cell being an electrode-electrolyte combination of either a primary, a secondary or a fuel cell.	<p>1. This group <u>does not cover</u> hybrid cells comprising capacitor electrodes and battery electrodes, which are covered by group H01G 11/00.</p> <p>2. In this group, hybrid cells are electrochemical generators having two different types of half-cells, the half-cell being an electrode-electrolyte combination of either a primary, a secondary or a fuel cell.</p>
N	H01M 14/00		<p>This group <u>does not cover</u> solar cells, photocells, photoelectrochemical cells or photovoltaic cells, which are covered by the following groups:</p> <ul style="list-style-type: none"> • semiconductor devices sensitive to light and adapted for the conversion of the energy of such radiation into electrical energy are covered by group H01L 31/00; • solid-state devices using organic materials as active part specially adapted for sensing light and adapted for the conversion of the energy of such radiation into electrical energy are covered by group H01L 51/42; • electrolytic light-sensitive devices, e.g. dye-sensitised solar cells, are covered by group H01G 9/20; • photovoltaic modules structurally associated with energy storage means, e.g.

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<u>Type</u>	<u>Location</u>	<u>Old Note</u>	<u>New/Modified Note</u>
			batteries, are covered by group H02S 40/38.

*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.

2. A. DEFINITIONS (new)

H01M 2/02

References

Informative references

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

Working of plastics or substances in plastic state	B29C , B29D
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H01M 4/82

References

Informative references

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

Single step processes	B21D , B22D
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H01M 6/36

References

Informative references

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

Thermoelectric solid state devices	H01L35/00 , H01L37/00
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H01M 10/48

References

Informative references

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

Indicating or measuring level of liquid in general	G01F23/00
Measuring density	G01N , G01N9/00
Measuring electric variables	G01R31/36
Methods for charging or discharging	H01M10/44

H01M 12/04

References

Informative references

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

Methods or arrangements for servicing or maintenance	H01M6/50
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H01M 12/08

References

Informative references

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

Methods or arrangements for servicing or maintenance, e.g. for charging	H01M10/42
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DEFINITIONS (modified)

H01M

References

Limiting References

DELETE: Limiting references section

Informative references

DELETE: In Informative references, DELETE the entry for “Containers or packages with special means for dispensing contents for batteries B65D85/88”

Special rules of classification

Delete: In the Special rules of classification section, the existing first paragraph shown below.

Every technical aspect of the invention is classified with inventive symbols and additional information from the description with additional symbols. When the battery or fuel cell is characterised by the combination of a specific positive electrode, specific negative electrode and/or specific electrolyte: every specific components of the combination will be classified with inventive symbols.

Replace: The deleted paragraph with the following two paragraphs.

Every technical aspect of the invention is classified with inventive symbols and additional information from the description with additional symbols.

When the battery or fuel cell is characterised by the combination of a specific positive electrode, specific negative electrode and/or specific electrolyte: every specific component of the combination will be classified with inventive symbols.

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H01M4/00 (modified)

References:

Informative references:

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

INSERT: In the existing Informative references table, the following new entry for “Electrodes for electrolytic processes C25, C25B11/00, C25C7/02, C25D17/10”

Special rules of classification

DELETE: Bullet point “The IPC rule concerning electrode for hybrid cells is applied”

H01M 8/06 (modified)

Insert: The following new section: References/Limiting references.

References

Limiting references

This place does not cover:

Regenerative fuel cells	H01M8/18
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H01M 10/00 (modified)

References

Special rules of classification

Delete: In the Special rules of classification section, the existing 4th bulleted statement shown below.

For non aqueous secondary battery, a class indicating the type of battery, e.g. H01M 10/052 should always be given in addition to the classes related to construction H01M 10/058-H01M 10/0587 or to the classes related to the type of electrolyte H01M 10/056- H01M 10/0569.

Replace: In the Special rules of classification section, the bulleted statement which was deleted with the following new statement.

For non-aqueous secondary battery, a class indicating the type of battery, e.g. H01M 10/052 should always be given in addition to the classes related to construction H01M 10/058 - H01M 10/0587 or to the classes related to the type of electrolyte H01M 10/056- H01M 10/0569.

H01M 12/00 (modified)

Definition statement

REPLACE: Existing Definition statement with the one below

This place covers:

hybrid cells, e.g. half-cell of fuel cell type and half-cell of primary or secondary cell type

Relationships with other classification places

REPLACE: Existing Relationship with other classification places with the one below

Solid electrolytic capacitors, double-layer capacitors, are classified in H01G9/155

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References

ADD: References/Limiting references section below

Limiting references

This place does not cover:

Hybrid capacitors; Electric double-layer [EDL] capacitors	H01G11/00
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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	H01M 10/04	H01M 10/04, H01M 10/058
C	H01M 12/00	H01M 12/00, H01G 11/00, H01G 11/02, H01G 11/04, H01G 11/06, H01G 11/08, H01G 11/10, H01G 11/12, H01G 11/14, H01G 11/16, H01G 11/18, H01G 11/20, H01G 11/22, H01G 11/24, H01G 11/26, H01G 11/28, H01G 11/30, H01G 11/32, H01G 11/34, H01G 11/36, H01G 11/38, H01G 11/40, H01G 11/42, H01G 11/44, H01G 11/46, H01G 11/48, H01G 11/50, H01G 11/52, H01G 11/54, H01G 11/56, H01G 11/58, H01G 11/60, H01G 11/62, H01G 11/64, H01G 11/66, H01G 11/68, H01G 11/70, H01G 11/72, H01G 11/74, H01G 11/76, H01G 11/78, H01G 11/80, H01G 11/82, H01G 11/84, H01G 11/86

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<u>Type*</u>	<u>From CPC Symbol (existing)</u>	<u>To CPC Symbol(s)</u>
F	H01M 12/005	H01G 11/00, H01G 11/02, H01G 11/04, H01G 11/06, H01G 11/08, H01G 11/10, H01G 11/12, H01G 11/14, H01G 11/16, H01G 11/18, H01G 11/20, H01G 11/22, H01G 11/24, H01G 11/26, H01G 11/28, H01G 11/30, H01G 11/32, H01G 11/34, H01G 11/36, H01G 11/38, H01G 11/40, H01G 11/42, H01G 11/44, H01G 11/46, H01G 11/48, H01G 11/50, H01G 11/52, H01G 11/54, H01G 11/56, H01G 11/58, H01G 11/60, H01G 11/62, H01G 11/64, H01G 11/66, H01G 11/68, H01G 11/70, H01G 11/72, H01G 11/74, H01G 11/76, H01G 11/78, H01G 11/80, H01G 11/82, H01G 11/84, H01G 11/86

* 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.

NOTES:

- Only C, D, F and Q type entries are included in the table above.
- When multiple symbols are included in the “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>” or “<administrative transfer to XX and YY simultaneously>” when administrative transfer of the same documents is to more than one place.
- Administrative transfer to main trunk groups is assumed to be “invention information”, unless otherwise indicated, and to 2000 series groups is assumed to be “additional information”.

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5. CROSS-REFERENCE LIST (CRL)

Definitions references impacted by this revision project

<u>Location of reference to be changed</u>	<u>Referenced subclass or group to be changed</u>	<u>Section of definition</u>	<u>Action: New reference symbol; New text</u>
C07F	H01M	Informative references	Replace the referenced symbol in the Informative references table with the following symbol: H01L 51/50
H04R 25/602	Constructional aspects of miniature batteries or batteries for portable equipment H01M 10/04	Informative references	Replace the referenced row in the Informative references table with the following row: Secondary cells; Manufacture thereof, Details, Construction or manufacture in general, small-sized flat cells or batteries portable equipment H01M 10/0436
H04R 25/602		Informative references	Add the following new row to the Informative references table: Constructional details or processes of manufacture of the non-active parts, Cases, jackets or wrappings for small-sized cells or batteries, e.g. miniature battery or power cells, batteries or cells for portable equipment H01M 2/0202

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NOTES:

- The CRL tables above are used for changes to locations **outside** of the project scope. Changes to references in scheme titles or definitions **inside** the project scope will be reflected in the “scheme change” template or one of the “definition” templates.
- In addition to other changes proposed in the tables above, in the column titled “Referenced subclass or group to be changed,” **referenced** D symbols should indicate an action of “delete” or should indicate a replacement symbol and **referenced** F symbols should indicate a replacement symbol.
- When a reference is deleted, text related to that reference will also be deleted unless other references or a range of references associated with the same text remain.