EUROPEAN PATENT OFFICE U.S. PATENT AND TRADEMARK OFFICE

CPC NOTICE OF CHANGES 780

DATE: JANUARY 1, 2020

PROJECT RP0605

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

Action	Subclass	Group(s)
DEFINITIONS:		
Definitions New:	H02J	3/12, 3/32
Definitions Modified:	H02J	subclass
	Н02Ј	1/00, 1/02, 1/10, 1/14, 3/00, 3/01, 3/06, 3/18, 3/24, 3/38, 5/00, 7/00, 7/34, 9/061, 11/00, 13/00, 15/00, 50/00, 50/60

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

1. CLASSIFICATION SCHEME CHANGES

	А.	New,	Modified	or	Deleted	Group(s)
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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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2. A. DEFINITIONS (new)

Insert: The following <u>new</u> definitions for subclass H02J.

H02J 3/12

References

Informative references

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

Voltage regulation G05F 1/10

H02J 3/32

References

Informative references

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

Vehicle-to-grid [V2G] arrangements	B60L 55/00
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2. A. DEFINITIONS (modified)

Insert: The following <u>new</u> modifications for subclass H02J.

H02J

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:

Insert: The following two <u>new</u> rows into the *Application-oriented references* table.

Electrical networks for vessels	B63J
Electrical networks for aircrafts	B64D

Informative references

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

<u>Delete</u>: The following rows from the *Informative references* table.

Vessels networks	B63J
Aircraft networks	B64D
Power supplies for movable barriers, electric doors,	E06B
electric sunshades	
Control of a single motor or generator, of the types	H02N
covered by subclass H02N	

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Insert: The following <u>new</u> rows into the *Informative references* table.

Steam turbines	F01K
Gas turbines	F02C
Wind power generation	F03D
Photovoltaic elements	H01L 31/00
Fuel cells	H01M 8/00
Boards, substations or switching arrangements	H02B
Electric protections	H02H
Solar power generation	H02S

<u>Replace</u>: The text for the reference H02P with the following new text in the *Informative references* table.

Control or regulation of electric motors, electric	H02P	
generators or dynamo-electric converters		

Special rules of classification

Replace: The 2nd paragraph

"If a breakdown indexing code of the subclass H02J (only for additional information) is given, it must always be accompanied by a main trunk symbol under H02J, for invention or additional information. For example, if a document gets the breakdown indexing code H02J2003/001 only, the document will not be automatically retrieved when checking the documents having the main trunk symbol H02J3/00 as additional information. On practice, the document will not be considered part of the H02J3/00 collection."

with the following new paragraph

If a breakdown indexing code of the subclass H02J (only for additional information) is given, it must always be accompanied by a main trunk symbol under H02J, for invention or additional information.

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H02J 1/00

References

Limiting references

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

Insert: The following new Application-oriented references section and 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:

Electric propulsion with power supplied within the vehicle	B60L 50/00
Electric circuits specially adapted for vehicles	B60R 16/00
Power supplies for memories	G05G
Power supply, e.g. DC power supply, for computers	G06F 1/26
Fuel cells	H01M 8/00
Power supplies for dc lamps	H05B 47/00

Insert: The following new *Informative references* section and references.

Informative references

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

Load protection by tripping of the load for dc systems	H02H
DC/DC power converters	H02M 3/00
AC/DC or DC/AC power converters	H02M 7/00

<u>Delete</u>: The <u>entire</u> Special rules of classification table and section.

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H02J 1/02

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:

<u>Replace</u>: The text for the reference H02M 1/14 with the following new text.

Arrangements for reducing harmonics or ripples in	H02M 1/14
converters	

H02J 1/10

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:

<u>Replace</u>: The text for the reference H02J 7/34 with the following new text.

Parallel operation of dc sources involving batteries H02J 7/34

H02J 1/14

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:

<u>Replace</u>: The text for the reference H02J 7/34 with the following new text.

Balancing the load in a network by batteries	H02J 7/34
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H02J 3/00

References

Informative references

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

<u>Delete</u>: The existing three rows from the *Informative references* table.

Insert: The following <u>new</u> rows into the *Informative references* table.

Wind turbines	F03D 9/00
Computer systems for trading	G06Q 30/00
Systems, methods for trading (electricity/gas/water)	G06Q 50/06
Details of switches for load protection	H01H
Photovoltaic panel	H01L 31/00
Mechanical details of connectors	H01R
Electromechanical details	H02B
Load protection by tripping of the load for ac systems	H02H
Harmonic reduction application for converters	H02M 1/12
Details of converters for reactive power compensation and ac power generation from dc sources	H02M 7/48
Details of converters for HVDC	H02M 7/7575
Preventing/reducing oscillation with a single generator	H02P9/00

Limiting references

This place does not cover:

Delete: The entire Limiting references table and section.

Special rules of classification

<u>Delete</u>: The <u>entire</u> Special rules of classification table and section.

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H02J 3/01

References

Informative references

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

<u>Replace</u>: The text for the reference H02M 1/12 with the following new text.

Arrangements for reducing harmonics or ripples in	H02M 1/12
converters	

H02J 3/06

References

Limiting references

This place does not cover:

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

Insert: The following new *Informative references* section and reference.

Informative references

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

Arrangements for feeding a single network by two or	H02J 3/38
more generators, converters or transformers in	
parallel	

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H02J 3/18

Insert: The following <u>new</u> Relationships with other classification places section.

Relationships with other classification places

In group H02H 9/08, the coil is not used for any reactive power compensation, but for limiting earth fault currents.

References

Limiting references

This place does not cover:

<u>Replace</u>: The text for the reference H02J 3/16 with the following new text.

5 , 5 5	H02J 3/16	
by changing a characteristic of the network load by		
adjustment of reactive power		

H02J 3/24

References

Limiting references

This place does not cover:

<u>Replace</u>: The text for the reference H02P 9/00 with the following new text.

Arrangements for preventing or reducing oscillations of power in networks by control effected upon a	H02P 9/00	
single generator		

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H02J 3/38

References

Limiting references

This place does not cover:

Delete: The entire Limiting references table and section.

Insert: The following new *Informative references* section and reference.

Informative references

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

Vehicle-to-grid [V2G] arrangements	B60L 55/00
Parallel connections of DC/AC converters not for	H02M 7/493
feeding a network, but a local load	

H02J 5/00

References

Limiting references

This place does not cover:

<u>Delete</u>: The following rows from the *Limiting references* table.

Circuit arrangements for dc mains or dc distribution networks	H02J 1/00
Arrangements for balancing of the load in a network	H02J 3/32
by storage of energy using batteries with converting	
means	
Arrangements for parallely feeding a single network	H02J 3/38
by two or more generators, converters or	
transformers	
Details for sending and receiving coils	H01F
Ac/dc or dc/ac converters	H02M 7/00

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Insert: The following new *Informative references* section and references.

Informative references

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

Circuit arrangements for dc mains or dc distribution networks	H02J 1/00
Details for sending and receiving coils	H01F
Ac/dc or dc/ac converters	H02M 7/00

Special rules of classification

<u>Replace</u>: The text (dc and ac) in the following paragraph

A system used for feeding an ac distribution network from the output of dc power source like fuel cells, solar panels belongs to H02J3/38 and not to H02J5/00, even if a dc to ac transfer is involved.

with the text capitalized DC and AC, as shown below

A system used for feeding an ac distribution network from the output of DC power source like fuel cells, solar panels belongs to H02J3/38 and not to H02J5/00, even if a DC to AC transfer is involved.

H02J 7/00

References

Limiting references

This place does not cover:

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

Insert: The following new Application-oriented references section and references.

References

Application-oriented references

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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:

Charging stations or on-board charging equipment for electrically-propelled vehicles	B60L 53/00
Details of telephone stands	H04M

Informative references

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

Insert: The following rows into the *Informative references* table.

Electrical circuits for vehicles	B60R
Vehicle starting circuits	F02D
Methods for charging or discharging secondary cells	H01M 10/44
Mechanical details of battery charger alternators	H02K
DC/DC power converters	H02M 3/00
AC/DC or DC/AC power converters	H02M 7/00
Perpetuum mobile	H02N
Control of alternators	H02P9/00

<u>Delete</u>: The following rows from the *Informative references* table.

For over-discharge protection	H02H7/18
Near-field transmission systems, e.g. inductive loop type	H04B5/00

Special rules of classification

<u>Replace</u>: The entire content (two paragraphs and table) of the *Special rules of classification* section with the new paragraph shown below.

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If the document deals with the controlled charging of a capacitor, e.g. a supercapacitor, it is mandatory to assign a combination of the symbol H02J7/345 and CPC symbols, which would apply, if the capacitor was replaced with a battery.

H02J 7/34

References

Limiting references

This place does not cover:

<u>Delete</u>: The following row from the *Limiting references* table.

Arrangements for balancing of the load in an AC	H02J 3/32
network by storing energy using batteries with	
converting means	

<u>Replace</u>: The text for the reference H02J 7/14 with the following new text.

H02J 9/061

Definition statement

This place covers:

<u>Replace</u>: The existing paragraph with the following new text.

Emergency, back-up or standby power supplies integrating power electronic converters for the different power conversions within the units: e.g. rectifiers, battery chargers, voltage regulators.

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References

Limiting references

This place does not cover:

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

H02J 11/00

References

Informative references

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

<u>Replace</u>: The text for the reference H02J 9/00 with the following new text.

Emergency or standby power supply arrangements	H02J 9/00
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H02J 13/00

References

Limiting references

This place does not cover:

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

Informative references

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

<u>Delete</u>: The following rows from the *Informative references* table.

Monitoring	G05B 15/02
Programmed control systems	G05B 19/00
Computer aided design (CAD), simulation, modelling	G06F 17/00

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Computing for organisational, economical, commercial, marketing purposes	G06Q
Measured data transmission systems	G08C
Communication using power lines (PLC, power line carrier)	H04B 3/00
Details of data switching networks	H04L12/2803

Insert:

The following rows into the *Informative references* table.

Electricity meters involved (in particular smart meters)	G01D 4/00
Measuring of electric variables	G01R
Power strips with locally controlled on/off capability for computers	G06F 1/266
Data processing systems or methods adapted for electricity supply	G06Q 50/06
Transmission systems for measured values or control signals	G08C
Details of switches	H01H
Circuits for indication of single switches	H01H 9/167
Power strips with locally controlled on/off capability	H01R 13/66
Power line carrier	H04B 3/54
Transmission of digital information	H04L
Telecontrol or telemetry systems	H04Q 9/00
Wireless communication	H04W

H02J 15/00

References

Limiting references

This place does not cover:

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Conjoint control of energy storage in vehicles	B60W 10/00
Details of accumulators for supplying fluids under pressure	F15B 1/04
Thermal storage - cold	F24F 5/00
Thermal storage - heaters	F24H 7/00
Thermal storage - heat	F28D 20/00
Capacitors	H01G
Fly-wheel generators	H02K 7/02

<u>Replace</u>: The text for the following references with the following new text.

Mechanical systems therefor	F01 - F04
Systems for storing electric energy in chemical form	H01M

Informative references

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

<u>Replace</u>: The text for the following references with the following new text.

Insert: The following rows into the *Informative references* table.

Hydrogen production by electrolyses of water	C25B 1/04
Storage heaters	F24H 7/00
Heat storage	F28D 20/00
Capacitors	H01G
Flywheels for dynamo-electric machines	H02K 7/02

H02J 50/00

Insert: The following new Application-oriented references section and references.

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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:

Inductive energy transfer between a charging	B60L 53/12
station and an electric vehicle	

Synonyms and Keywords

In patent documents, the following words/expressions are often used as synonyms:

<u>Replace</u>: The existing paragraph as a bulleted expression, as shown below

 "cordless power transfer" or "wireless power transmission" or "wireless energy transmission" or "wireless power transfer" or "contactless power transfer"

H02J 50/60

Definition statement

This place covers:

<u>Delete</u>: The following paragraph (1st paragraph) from the Definition statement section.

Circuit arrangements or systems for wireless supply ..., or the response to the presence of, foreign objects.