

EUROPEAN PATENT OFFICE
U.S. PATENT AND TRADEMARK OFFICE

CPC NOTICE OF CHANGES 341

DATE: AUGUST 1, 2017

PROJECT MP0337

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

<u>Action</u>	<u>Subclass</u>	<u>Group(s)</u>
Title wording change:	B60W	20/00
	B60W	20/11
	B60W	20/12
	B60W	20/30
	B60W	20/40
Modified Definitions:	B60W	20/00
	B60W	20/11
	B60W	20/14
	B60W	20/15
	B60W	20/17
	B60W	20/18
	B60W	20/20
	B60W	20/30
	B60W	20/40
	B60W	20/50
Scheme Notes to be deleted:	B60W	20/00

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 Notice(s)
 - C. New, Modified or Deleted Note(s)
 - D. New, Modified or Deleted Guidance Heading(s)
2. DEFINITIONS (New or Modified)
 - A. DEFINITIONS (Full definition template)
 - B. DEFINITIONS (Definitions Quick Fix)
3. REVISION CONCORDANCE LIST (RCL)
4. CHANGES TO THE CPC-TO-IPC CONCORDANCE LIST (CICL)
5. CROSS-REFERENCE LIST (CRL)

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1. CLASSIFICATION SCHEME CHANGES

A. New, Modified or Deleted Group(s)

SUBCLASS B60W- CONJOINT CONTROL OF VEHICULE SUB-UNITS OF DIFFERENT TYPE OR DIFFERENT FUNCTION; CONTROL SYSTEMS SPECAILLY ADAPTED FOR HYBRID VEHICLES; ROAD VEHICLE CONTROL SYSTEMS FOR PURPOSES NOT RELATED TO THE CONTROL OF A PARTICULAR SUB-UNIT

<u>Type*</u>	<u>Symbol</u>	<u>Indent Level Number of dots (e.g. 0, 1, 2)</u>	<u>Title (new or modified)</u> <u>“CPC only” text should normally be enclosed in {curly brackets}**</u>	<u>Transferred to#</u>
M	B60W 20/00	0	Control systems specially adapted for hybrid vehicles {(hybrid vehicle design, B60K 6/00; electric vehicles B60L)}	
M	B60W 20/11	2	using model predictive control [MPC] strategies, i.e. control methods based on models predicting performance {(utilising navigation and traffic information in the control strategy B60W 20/12)}	
M	B60W 20/12	2	using control strategies taking into account route information{(estimation or calculation of non-directly measurable driving parameters B60W 40/00)}	
M	B60W 20/30	1	Control strategies involving selection of transmission gear ratio {(control of change speed gearings, together with other vehicle sub-units B60W10/10; HEV transmission gearing B60K 6/36; gearings and control thereof F16H)}	
M	B60W 20/40	1	Controlling the engagement or disengagement of prime movers, e.g. for transition between prime movers {(power-up or power-down of the driveline B60W 30/192)}	

*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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C. New, Modified or Deleted Note(s)

SUBCLASS B60W- CONJOINT CONTROL OF VEHICLE SUB-UNITS OF DIFFERENT TYPE OR DIFFERENT FUNCTION; CONTROL SYSTEMS SPECIALLY ADAPTED FOR HYBRID VEHICLES; ROAD VEHICLE CONTROL SYSTEMS FOR PURPOSES NOT RELATED TO THE CONTROL OF A PARTICULAR SUB-UNIT

<u>Type*</u>	<u>Location</u>	<u>Old Note</u>	<u>New/Modified Note</u>
D	B60W 20/00	Classification is also made in B60K 6/42 for the different types of hybrid electric vehicles	

*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

<u>Symbol</u>	<u>Location of change</u> (e.g., section title)	<u>Existing reference symbol or text</u>	<u>Action; New symbol; New/modified text</u>
B60W 20/00			<p><u>Insert</u> the following <u>new</u> section:</p> <p>Special Rules of Classification</p> <p>Multi-aspect classification practice is used in this group for control systems specially adapted for hybrid vehicles. Whenever one or more specific types of sub-units are controlled, classification in main group B60W 10/00 should be given for each of the different sub-units controlled. When the architecture or type of transmission of the hybrid vehicle is of interest, it should be classified in the relevant groups of B60K 6/00.</p>
B60W 20/11	Limiting references		<p><u>Add</u> the following <u>new</u> row to the Limiting references table:</p> <p>Control strategies based on data provided by conventional technology, e.g. optimum fuel consumption line B60W 20/10.</p>
B60W 20/11	Glossary	Model Predictive Control; Control relying on one or more models of the drive train or vehicle sub-units.	<p><u>Add</u> the following text after “vehicle sub-units” in the <u>first</u> sentence of the existing text:</p> <p>, wherein the presently applied control signal is based on an optimal control signal computed over a future period of time.</p>
B60W 20/14	Limiting references	B60W 30/18127	<p><u>Replace</u> the symbol with:</p> <p>B60L 7/10</p>
B60W 20/15	Definition Statement	Control strategies directed to performance or operation of the vehicle in such a way so as to provide a specific benefit.	<p><u>Add</u> the following text after “benefit” in the existing paragraph:</p> <p>, e.g. maintaining lubrication of an engine.</p>
B60W 20/17	Definition Statement	Control strategies mitigating vehicle noise.	<p><u>Add</u> the following text after “noise” in the existing paragraph:</p>

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<u>Symbol</u>	<u>Location of change</u> (e.g., section title)	<u>Existing reference symbol or text</u>	<u>Action; New symbol; New/modified text</u>
			, e.g. for driver comfort, quiet running in noise abatement areas.
B60W 20/18	Definition Statement	Control strategies preventing the fuel from getting old.	<u>Replace</u> with the following text: Control strategies related to extended engine off times, e.g. preventing the fuel from getting old, cylinder purging, lubrication issues.
B60W 20/20	Definition Statement	Control systems deciding which hybrid configuration is used.	<u>Add</u> the following text after “used” in the existing paragraph: for vehicles with a drive train architecture which allows for different configurations, e.g. parallel, serial.
B60W 20/30	Definition Statement	Control systems deciding selection of transmission gear ratio.	<u>Add</u> the following text after “ratio” in the existing paragraph: , e.g. with a limited number of available gear ratios for electric drive mode or with a different number of available gear ratios in electric mode and in internal combustion mode.
B60W 20/30	Synonyms and Keywords	•"transmission" and "gearing"	<u>Replace</u> with the following text: <ul style="list-style-type: none"> • "transmission", “gearbox” and "gearing"
B60W 20/40	Definition Statement	Control systems for enabling smooth transition between motor and engine propulsion, e.g. during hill hold.	<u>Add</u> the following text after “hold” in the existing paragraph: , during synchronisation processes, during transition between electrical and combined drive mode.
B60W 20/50	Definition Statement	Control strategies evaluating or monitoring of an operational condition of the vehicle to identify any potential failure, or operation of the vehicle with minimum or no harm to the vehicle in the event of failure, e.g. driving the vehicle to a reasonable distance without necessarily damaging the engine.	<u>Add</u> the following text after “engine” in the existing paragraph: , electrical drive mode when fuel tank is empty.

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- The table above is used for corrections or modifications to existing definitions, e.g. delete an entire definition or part thereof; propose new wording or modify wording of a section, change the symbol the definition is associated with, change or delete a reference symbol, etc.
- Do not delete (F) symbol definitions.