EUROPEAN PATENT OFFICE U.S. PATENT AND TRADEMARK OFFICE

CPC NOTICE OF CHANGES 650

DATE: FEBRUARY 1, 2019

PROJECT RP0565

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

Action	Subclass	Group(s)
SCHEME:		
Symbols Deleted:	B60L	11/00, 11/002, 11/005, 11/007, 11/02, 11/04, 11/06, 11/08, 11/10, 11/12, 11/123, 11/126, 11/14, 11/16, 11/18, 11/1801, 11/1803, 11/1805, 11/1807, 11/1809, 11/1811, 11/1812, 11/1814, 11/1816, 11/1818, 11/182, 11/1822, 11/1824, 11/1825, 11/1827, 11/1829, 11/1831, 11/1833, 11/1835, 11/1837, 11/1838, 11/184, 11/1842, 11/1844, 11/1846, 11/1848, 11/185, 11/1851, 11/1853, 11/1855, 11/1857, 11/1859, 11/1861, 11/1862, 11/1864, 11/1866, 11/1868, 11/187, 11/1872, 11/1874, 11/1875, 11/1877, 11/1879, 11/1881, 11/1883, 11/1885, 11/1887, 11/1888, 11/189, 11/1892, 11/1894, 11/1896, 11/1898
	B60L	2230/00, 2230/10, 2230/12, 2230/14, 2230/16, 2230/20, 2230/22, 2230/24, 2230/26, 2230/28, 2230/30, 2230/32, 2230/34, 2230/40
<u> </u>	DCOL	
Symbols New:	B60L	50/00, 50/10, 50/11, 50/12, 50/13, 50/14, 50/15, 50/16, 50/20, 50/30, 50/40, 50/50, 50/51, 50/52, 50/53, 50/60, 50/61, 50/62, 50/64, 50/66, 50/70, 50/71, 50/72, 50/75, 50/90
	B60L	53/00, 53/10, 53/11, 53/12, 53/122, 53/124, 53/126, 53/14, 53/16, 53/18, 53/20, 53/22, 53/24, 53/30, 53/302, 53/305, 53/31, 53/32, 53/34, 53/35, 53/36, 53/37, 53/38, 53/39, 53/50, 53/51, 53/52, 53/53, 53/54, 53/55, 53/56, 53/57, 53/60, 53/62, 53/63, 53/64, 53/65, 53/66, 53/665, 53/67, 53/68, 53/80
	B60L	55/00
	B60L	58/00, 58/10, 58/12, 58/13, 58/14, 58/15, 58/16, 58/18, 58/19, 58/20, 58/21, 58/22, 58/24, 58/25, 58/26, 58/27, 58/30, 58/31, 58/32, 58/33, 58/34, 58/40
Titles Changed:	B60K	1/04
	B60L	subclass
	B60L	3/00
	BOUL	8/00
	BOOL	5/06
	0000	
Warnings New:	B60K	1/04
	B60L	3/00, 3/0046, 3/0053
	B60L	9/00
	B60L	50/50, 50/53, 50/60, 50/64, 50/70, 50/75

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Action	Subclass	Group(s)
	B60L	53/00, 53/10, 53/12, 53/122, 53/124, 53/126, 53/14, 53/18, 53/30, 53/302, 53/305, 53/34, 53/50, 53/60, 53/62, 53/66, 53/67, 53/68, 53/80
	B60L	58/00, 58/10, 58/12, 58/13, 58/14, 58/15, 58/16, 58/18, 58/19, 58/20, 58/21, 58/22, 58/24, 58/25, 58/26, 58/27, 58/30, 58/31, 58/32, 58/33, 58/34, 58/40
	B60S	5/06
Notes New:	B60L	50/64, 50/72
	B60L	58/00
DEFINITIONS:		
Definitions Deleted:	B60L	11/00, 11/002, 11/005, 11/007, 11/02, 11/123, 11/126, 11/14, 11/16, 11/18, 11/1801, 11/1803, 11/1805, 11/1809, 11/1811, 11/1812, 11/1814, 11/1816, 11/1818, 11/182, 11/1822, 11/1824, 11/1825, 11/1827, 11/1829, 11/1831, 11/1833, 11/1835, 11/1838, 11/184, 11/1842, 11/1844, 11/1846, 11/1848, 11/185, 11/1851, 11/1853, 11/1855, 11/1857, 11/1859, 11/1861, 11/1862, 11/1864, 11/1866, 11/1868, 11/187, 11/1872, 11/1877, 11/1881, 11/1883, 11/1885, 11/1887, 11/1888, 11/189, 11/1896
Definitions New:	B60L	50/00, 50/10, 50/16, 50/20, 50/30, 50/40, 50/50, 50/51, 50/52, 50/53, 50/60, 50/61, 50/62, 50/66, 50/70, 50/71, 50/72, 50/90
	B60L	53/00, 53/11, 53/12, 53/14, 53/20, 53/22, 53/24, 53/30, 53/31, 53/35, 53/36, 53/38, 53/39, 53/60, 53/63, 53/64, 53/65, 53/665, 53/80
	B60L	55/00
	B60L	58/12, 58/13, 58/14, 58/16, 58/18, 58/19, 58/20, 58/21, 58/22, 58/25, 58/31, 58/32
Definitions Modified:	B60K	1/04
	B60L	subclass
	B60L	3/00, 3/0046, 3/0053
	B60L	8/00
	B60L	9/00
	B60S	5/06

The following subclasses are also impacted by this Notice of Changes (indicate subclasses/groups outside of the project scope, such as those listed in the CRL): A61G, B60H, B60K, B60M, B60R, B60S, B60W, G01R, G07F, H01F, H01M, H02H, H02J, H02K

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

1. CLASSIFICATION SCHEME CHANGES

- \land A. New, Modified or Deleted Group(s)
- B. New, Modified or Deleted Warning(s)
- \bigcirc 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. <u>New, Modified or Deleted Group(s)</u>

SUBCLASS B60K - ARRANGEMENT OR MOUNTING OF PROPULSION UNITS OR OF TRANSMISSIONS IN VEHICLES; ARRANGEMENT OR MOUNTING OF PLURAL DIVERSE PRIME-MOVERS IN VEHICLES; AUXILIARY DRIVES FOR VEHICLES; INSTRUMENTATION OR DASHBOARDS FOR VEHICLES; ARRANGEMENTS IN CONNECTION WITH COOLING, AIR INTAKE, GAS EXHAUST OR FUEL SUPPLY OF PROPULSION UNITS IN VEHICLES

Type*	<u>Symbol</u>	Indent Level	Title	Transferred to [#]
		Number of dots	"CPC only" text should normally be	
		(e.g. 0, 1, 2)	enclosed in {curly brackets}**	
C	B60K 1/04	1	of the electric storage means for propulsion	B60K1/04, B60L53/80
			(exchanging batteries for electric propulsion	
			of vehicles B60L 53/80; for auxiliary	
			purposes only B60R 16/04; supplying	
			batteries to, or removing batteries from,	
			vehicles B60S 5/06)	

SUBCLASS B60L - ELECTRIC EQUIPMENT OR PROPULSION OF ELECTRICALLY-PROPELLED VEHICLES; MAGNETIC SUSPENSION OR LEVITATION FOR VEHICLES; ELECTRODYNAMIC BRAKE SYSTEMS FOR VEHICLES, IN GENERAL (electric coupling devices combined with mechanical couplings of vehicles B60D 1/62; electric heating for vehicles B60H; transmitting drive from electric motors to ultimate propulsive elements in vehicles B60K; disposition of electric propulsion equipment, other than current collectors, in vehicles B60K; auxiliary generator drives on vehicles B60K; lighting for vehicles B60Q; vehicle brake control systems in general B60T; preventing wheel slip by reducing power in rail vehicles B61C; railway track circuits in general B61L; lighting in general F21; H05B; switches in general H01H; coupling devices for electric connections in general H01R; dynamo-electric machines H02K; electric converters H02M; starting, controlling, braking of electric machines or converters in general H02P; electric heating in general H05B)

<u>Type</u> *	<u>Symbol</u>	Indent Level Number of dots (e.g. 0,	<u>Title</u> <u>"CPC only" text should normally be</u> <u>enclosed in{curly brackets}</u> **	<u>Transferred to[#]</u>
М	B60L	Subclass	PROPULSION OF ELECTRICALLY- PROPELLED VEHICLES (arrangements or mounting of electrical propulsion units or of plural diverse prime-movers for mutual or common propulsion in vehicles B60K 1/00, B60K 6/20; arrangements or mounting of electrical gearing in vehicles B60K 17/12, B60K 17/14; preventing wheel slip by reducing power in rail vehicles B61C 15/08; dynamo-electric machines H02K; control or regulation of electric motors H02P); SUPPLYING ELECTRIC POWER FOR AUXILIARY EQUIPMENT OF ELECTRICALLY-PROPELLED VEHICLES (electric coupling devices combined with mechanical couplings of vehicles B60D 1/64; electric heating for	

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<u>Type</u> *	Symbol	Indent Level Number of dots (e.g. 0,	<u>Title</u> <u>"CPC only" text should normally be</u> <u>enclosed in{curly brackets}</u> **	<u>Transferred to[#]</u>
		<u>1, 2)</u>	vehicles B60H 1/00); ELECTRODYNAMIC BRAKE SYSTEMS FOR VEHICLES IN GENERAL (control or regulation of electric motors H02P); MAGNETIC SUSPENSION OR LEVITATION FOR VEHICLES; MONITORING OPERATING VARIABLES OF ELECTRICALLY-PROPELLED VEHICLES; ELECTRIC SAFETY DEVICES FOR ELECTRICALLY- PROPELLED VEHICLES	
С	B60L 3/00	0	Electric devices on electrically-propelled vehicles for safety purposes; Monitoring operating variables, e.g. speed, deceleration or energy consumption (methods or circuit arrangements for monitoring or controlling batteries or fuel cells B60L 58/00)	B60L3/00, B60L58/00, B60L58/10, B60L58/12, B60L58/13, B60L58/14, B60L58/15, B60L58/16, B60L58/18, B60L58/19, B60L58/20, B60L58/21, B60L58/22, B60L58/24, B60L58/25, B60L58/26, B60L58/27, B60L58/30, B60L58/31, B60L58/32, B60L58/33, B60L58/34, B60L58/40
С	B60L3/0046	2	{relating to electric energy storage systems, e.g. batteries or capacitors}	B60L3/0046, B60L58/00, B60L58/10, B60L58/12, B60L58/13, B60L58/14, B60L58/15, B60L58/16, B60L58/18, B60L58/19, B60L58/20, B60L58/21, B60L58/22, B60L58/24, B60L58/25, B60L58/26, B60L58/27, B60L58/40
С	B60L3/0053	2	{relating to fuel cells}	B60L3/0053, B60L58/00, B60L58/30, B60L58/31, B60L58/32, B60L58/33, B60L58/34, B60L58/40
М	B60L 8/00	0	Electric propulsion with power supply from forces of nature, e.g. sun or wind	
С	B60L 9/00	0	Electric propulsion with power supply external to the vehicle (electric propulsion for monorail vehicles, suspension vehicles or rack railways B60L 13/00; in combination with batteries or fuel cells within the vehicle B60L 50/53)	B60L9/00, B60L50/53

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Type*	Symbol	Indent Level	<u>Title</u>	Transferred to [#]
		Number of	<u>"CPC only" text should normally be</u>	
		$\frac{\text{dots (e.g. 0,}}{1 2}$	enclosed in{curly brackets}**	
D	B60L 11/00	<u>1, 2)</u> 0	Electric propulsion with power supplied	<administrative td="" transfer<=""></administrative>
D	DOOL 11/00	Ū	within the vehicle (B60L 8/00, B60L 13/00	to B60L50/00>
			take precedence; arrangements or mounting	
			of plural diverse prime-movers for mutual or	
			common propulsion B60K 6/20; control	
			systems specially adapted for hybrid vehicles B60W 20/00)	
D	B60L11/002	1	{using electric power supply other than	<administrative td="" transfer<=""></administrative>
			engine driven generators, electrical or fuel- cells}	to B60L50/90>
D	B60L11/005	2	{using capacitors}	<administrative td="" transfer<=""></administrative>
				to B60L50/40>
D	B60L11/007	2	{using auxiliary power supplied by humans}	<administrative td="" transfer<=""></administrative>
	D (01 11/02	1	· · · · · ·	to B60L50/20>
D	B60L 11/02	1	using engine-driven generators	<administrative td="" transfer<=""></administrative>
D	B60L 11/04	2	using de generators and motors	10 DOUL30/10>
D	D00L 11/04	2	using de generators and motors	to B60L50/11>
D	B60L 11/06	2	using ac generators and dc motors	<administrative td="" transfer<=""></administrative>
				to B60L50/12>
D	B60L 11/08	2	using ac generators and motors	<administrative td="" transfer<=""></administrative>
				to B60L50/13>
D	B60L 11/10	2	using dc generators and ac motors	<administrative td="" transfer<=""></administrative>
D	D601 11/12	2	with additional alastria nowar supply a g	to B60L50/14>
D	D00L 11/12	2	accumulator	to B60L50/15>
D	B60L11/123	3	{using range extenders, e.g. series hybrid	<administrative td="" transfer<=""></administrative>
			vehicles}	to B60L50/61>
D	B60L11/126	4	{the range extender having low power output	<administrative td="" transfer<=""></administrative>
			with respect to maximum power output of the	to B60L50/62 >
			vehicle}	
D	B60L 11/14	2	with provision for direct mechanical	<administrative td="" transfer<=""></administrative>
D	D60L 11/16	1	propulsion	to B60L50/16>
D	DOUL 11/10	1	flywheel	to B60L50/30>
D	B60L 11/18	1	using power supply from primary cells.	<administrative td="" transfer<=""></administrative>
			secondary cells, or fuel cells	to B60L50/50>
D	B60L11/1801	2	{combined with an external power supply}	<administrative td="" transfer<=""></administrative>
				to B60L50/53>
D	B60L11/1803	2	{for vehicles propelled by ac-motors}	<administrative transfer<br="">to B60L50/51 ></administrative>
D	B60L11/1805	2	{for vehicles propelled by dc-motors}	<administrative transfer<br="">to B60L50/52></administrative>
D	B60L11/1807	2	{for vehicles propelled by position controlled	<administrative td="" transfer<=""></administrative>
			motors}	to B60L50/50>
D	B60L11/1809	2	{Charging electric vehicles}	<administrative transfer<br="">to B60L53/00></administrative>

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<u>Type</u> *	<u>Symbol</u>	Indent Level	Title	Transferred to [#]
		Number of	<u>"CPC only" text should normally be</u>	
		<u>dots (e.g. 0,</u>	<u>enclosed in{curly brackets}</u> **	
D	B60I 11/1811	<u>1, 2)</u> 3	[using convortors]	<administrativa td="" transfar<=""></administrativa>
D	D00L11/1011	5	{using converters}	to B60I 53/20
D	B60L11/1812	4	{Physical arrangements or structures of	<administrative td="" transfer<=""></administrative>
D	200211/1012	•	charging converters specially adapted for	to B60L53/22>
			charging electric vehicles}	
D	B60L11/1814	4	{the vehicle's propulsion converter is used	<administrative td="" transfer<=""></administrative>
			for charging}	to B60L53/24>
D	B60L11/1816	3	{by conductive energy transfer, e.g.	<administrative td="" transfer<=""></administrative>
			connectors}	to B60L53/14>
D	B60L11/1818	4	{Adaptations of plugs or sockets for charging	<administrative td="" transfer<=""></administrative>
			electric vehicles}	to B60L53/16>
D	B60L11/182	3	{by inductive energy transfer}	<administrative td="" transfer<=""></administrative>
				to B60L53/12>
D	B60L11/1822	3	{by exchange of energy storage elements,	<administrative td="" transfer<=""></administrative>
			e.g. removable batteries}	to B60L53/80>
D	B60L11/1824	3	{Details of charging stations, e.g. vehicle	<administrative td="" transfer<=""></administrative>
			recognition or billing (B60L11/1811,	to B60L53/30>
			B60L11/182, B60L11/1822 take	
D	DC0L11/1925	4	(Changing a change for clastric archicles)	a louinistantina taon afan
D	B60L11/1825	4	{Charging columns for electric vehicles}	<administrative td="" transfer<=""></administrative>
D	B60I 11/1827	1	Automatic adjustment of relative position	<pre>// contraction to DOULSS/S1/</pre>
D	D00L11/1027	4	{Automatic adjustment of relative position	to B60L 53/35
D	B60I 11/1829	5	{for inductive energy transfer}	<pre><administrative pre="" transfer<=""></administrative></pre>
D	D00E11/102)	5	(for mederive energy transfer)	to B60L53/38>
D	B60L11/1831	6	{with position related activation of primary	<administrative td="" transfer<=""></administrative>
		-	coils}	to B60L53/39>
D	B60L11/1833	5	{the vehicle being positioned}	<administrative td="" transfer<=""></administrative>
				to B60L53/36>
D	B60L11/1835	5	{with optical position determination, e.g. by	<administrative td="" transfer<=""></administrative>
			a camera}	to B60L53/37>
D	B60L11/1837	4	{by charging in short intervals along the	<administrative td="" transfer<=""></administrative>
			itinerary, e.g. during short stops}	to B60L53/32>
D	B60L11/1838	4	{Methods for the transfer of electrical energy	<administrative td="" transfer<=""></administrative>
_	D 102 11/101		or data between charging station and vehicle}	to B60L53/60>
D	B60L11/184	5	{Optimising energy costs, e.g. by charging	<administrative td="" transfer<=""></administrative>
	D (01 11/10/0		depending on electricity rates }	to B60L53/64>
D	B60L11/1842	5	Energy stored in the vehicle is provided to the network is a vehicle to avid $(V2C)$	<administrative td="" transfer<=""></administrative>
			arrangements)	10 DOUL33/00>
р	B60L11/18/4	5	I the charging being dependent on network	<pre>/administrative transfor</pre>
	DUUL11/1044	5	capabilities}	to B60L 53/63>
D	B60L11/1846	5	{Identification of the vehicle}	<administrative td="" transfer<=""></administrative>
	200211/10/0	5		to B60L53/65>
D	B60L11/1848	5	{Methods related to measuring, billing or	<administrative td="" transfer<=""></administrative>
			payment}	to B60L53/665>

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<u>Type</u> *	<u>Symbol</u>	Indent Level	<u>Title</u> "CBC only" tort should normally be	Transferred to [#]
		<u>dots (e.g. 0,</u>	enclosed in{curly brackets}**	
D	B60L11/185	<u>1,2)</u> 5	{Fast charging}	<administrative td="" transfer<=""></administrative>
D	B60L11/1851	2	{Battery monitoring or controlling; Arrangements of batteries, structures or switching circuits therefore}	<administrative transfer<br="">to B60L58/10></administrative>
D	B60L11/1853	3	{by battery splitting}	<administrative transfer<br="">to B60L58/18></administrative>
D	B60L11/1855	4	{by series/parallel switching}	<administrative transfer<br="">to B60L58/19></administrative>
D	B60L11/1857	3	{Battery age determination}	<administrative transfer<br="">to B60L58/16></administrative>
D	B60L11/1859	3	{Preventing deep discharging}	<administrative transfer<br="">to B60L58/14></administrative>
D	B60L11/1861	3	{Monitoring or controlling state of charge [SOC]}	<administrative transfer<br="">to B60L58/12></administrative>
D	B60L11/1862	4	{Target range for state of charge [SOC]}	<administrative transfer<br="">to B60L58/13></administrative>
D	B60L11/1864	3	{Control of a battery packs, i.e. of a set of batteries with the same voltage}	<administrative transfer<br="">to B60L58/21></administrative>
D	B60L11/1866	4	{Balancing the charge of multiple batteries or cells}	<administrative transfer<br="">to B60L58/22></administrative>
D	B60L11/1868	3	{Controlling two or more batteries with different voltages}	<administrative transfer<br="">to B60L58/20></administrative>
D	B60L11/187	3	{Battery temperature regulation}	<administrative transfer<br="">to B60L58/24></administrative>
D	B60L11/1872	4	{by control of electric loads}	<administrative transfer<br="">to B60L58/25></administrative>
D	B60L11/1874	4	{by cooling}	<administrative transfer<br="">to B60L58/26></administrative>
D	B60L11/1875	4	{by heating}	<administrative transfer<br="">to B60L58/27></administrative>
D	B60L11/1877	3	{Arrangements of batteries}	<administrative transfer<br="">to B60L50/66></administrative>
D	B60L11/1879	3	{Adaptation of battery structures for electric vehicles}	<administrative transfer<br="">to B60L50/64></administrative>
D	B60L11/1881	2	{Fuel cells monitoring or controlling; Arrangements of fuel cells, structures or switching circuits therefore}	<administrative transfer<br="">to B60L58/30></administrative>
D	B60L11/1883	3	{Details of fuel cells}	<administrative transfer<br="">to B60L50/72></administrative>
D	B60L11/1885	3	{Starting of fuel cells}	<administrative transfer<br="">to B60L58/31></administrative>
D	B60L11/1887	3	{combined with battery control}	<administrative transfer<br="">to B60L58/40></administrative>
D	B60L11/1888	3	{Fuel cell temperature regulation}	<administrative transfer<br="">to B60L58/32></administrative>

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		Number of	"CPC only" text should normally be	
		dots (e.g. 0,	enclosed in{curly brackets}**	
		1, 2)		
D	B60L11/189	4	{by control of electric loads}	<administrative td="" transfer<=""></administrative>
				to B60L58/32>
D	B60L11/1892	4	{by cooling}	<administrative td="" transfer<=""></administrative>
				to B60L58/33>
D	B60L11/1894	4	{by heating}	<administrative td="" transfer<=""></administrative>
				to B60L58/34>
D	B60L11/1896	3	{Arrangements of the fuel cells}	<administrative td="" transfer<=""></administrative>
				to B60L50/71>
D	B60L11/1898	3	{Adaptation of fuel cell structures for electric	<administrative td="" transfer<=""></administrative>
			vehicles}	to B60L50/72>
Ν	B60L 50/00	0	Electric propulsion with power supplied	
			within the vehicle (with power supply from	
			force of nature, e.g. sun or wind, B60L 8/00;	
			for monorail vehicles, suspension vehicles or	
			rack railways B60L 13/00)	
N	B60L 50/10	1	using propulsion power supplied by engine-	
			driven generators, e.g. generators driven by	
			combustion engines	
Ν	B60L 50/11	2	using DC generators and DC motors	
Ν	B60L 50/12	2	using AC generators and DC motors	
N	B60L 50/13	2	using AC generators and AC motors	
N	B60L 50/14	2	using DC generators and AC motors	
N	B60L 50/15	2	with additional electric power supply (with	
			capacitors charged by engine-driven	
			generators B60L 50/40; with batteries	
			charged by engine-driven generators B60L	
			50/61)	
N	B60L 50/16	2	with provision for separate direct mechanical	
			propulsion	
Ν	B60L 50/20	1	using propulsion power generated by humans	
			or animals	
Ν	B60L 50/30	1	using propulsion power stored mechanically,	
			e.g. in fly-wheels	
Ν	B60L 50/40	1	using propulsion power supplied by	
			capacitors	
Q	B60L 50/50	1	using propulsion power supplied by batteries	B60L50/50,
-			or fuel cells	B60L50/60, B60L50/64,
				B60L 50/70, B60L50/75
N	B60L 50/51	2	characterised by AC-motors	
Ν	B60L 50/52	2	characterised by DC-motors	
Ν	B60L 50/53	2	in combination with an external power	
			supply, e.g. from overhead contact lines	
Ν	B60L 50/60	2	using power supplied by batteries (in	
			combination with fuel cells B60L 50/75)	
Ν	B60L 50/61	3	by batteries charged by engine-driven	
			generators, e.g. series hybrid electric vehicles	

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<u>Type</u> *	<u>Symbol</u>	Indent Level Number of dots (e.g. 0,	<u>Title</u> <u>"CPC only" text should normally be</u> <u>enclosed in{curly brackets}</u> **	<u>Transferred to[#]</u>
N	B60L 50/62	<u>1, 2)</u> 4	charged by low-power generators primarily intended to support the batteries, e.g. range extenders	
N	B60L 50/64	3	Constructional details of batteries specially adapted for electric vehicles	
N	B60L 50/66	3	{Arrangements of batteries}	
N	B60L 50/70	2	using power supplied by fuel cells (in combination with batteries B60L 50/75)	
N	B60L 50/71	3	Arrangement of fuel cells within vehicles specially adapted for electric vehicles	
N	B60L 50/72	3	Constructional details of fuel cells specially adapted for electric vehicles	
N	B60L 50/75	2	using propulsion power supplied by both fuel cells and batteries	
N	B60L 50/90	1	using propulsion power supplied by specific means not covered by groups B60L 50/10- B60L 50/50, e.g. by direct conversion of thermal nuclear energy into electricity	
Q	B60L 53/00	0	Methods of charging batteries, specially adapted for electric vehicles; Charging stations or on-board charging equipment therefor; Exchange of energy storage elements in electric vehicles	B60L53/00, B60L53/50, B60L53/51, B60L53/52, B60L53/53, B60L53/54, B60L53/55, B60L53/56, B60L53/57, B60L53/67, B60L53/68
N	B60L 53/10	1	characterised by the energy transfer between the charging station and the vehicle	
N	B60L 53/11	2	{DC charging controlled by the charging station, e.g. mode 4}	
Q	B60L 53/12	2	Inductive energy transfer	B60L53/12, B60L53/122, B60L53/124, B60L53/126
N	B60L 53/122	3	Circuits or methods for driving the primary coil, e.g. supplying electric power to the coil	
N	B60L 53/124	3	Detection or removal of foreign bodies	
N	B60L 53/126	3	Methods for pairing a vehicle and a charging station, e.g. establishing a one-to-one relation between a wireless power transmitter and a wireless power receiver	
Q	B60L 53/14	2	Conductive energy transfer	B60L53/14, B60L53/18
N	B60L 53/16	3	Connectors, e.g. plugs or sockets, specially adapted for charging electric vehicles	
N	B60L 53/18	3	Cables specially adapted for charging electric vehicles	
N	B60L 53/20	1	characterised by converters located in the vehicle	

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Type*	Symbol	Indent Level	Title	Transferred to [#]
		Number of	"CPC only" text should normally be	
		<u>dots (e.g. 0,</u>	<u>enclosed in{curly brackets}</u> **	
N	D60L 52/22	<u>1, 2)</u>	Constructional datails or amongoments of	
IN	BOUL 55/22	2	charging converters specially adapted for	
			charging electric vehicles	
N	B60L 53/24	2	Using the vehicle's propulsion converter for	
11	B00E 55/21	2	charging	
Q	B60L 53/30	1	Constructional details of charging stations	B60L53/30, B60L53/302, B60L53/305, B60L53/34, B60L53/67, B60L53/68
Ν	B60L 53/302	2	Cooling of charging equipment	
N	B60L 53/305	2	{Communication interfaces }	
Ν	B60L 53/31	2	Charging columns specially adapted for	
N	D60L 52/22	2	(by charging in short intervals along the	
1	BOOL 35/32	2	itinerary, e.g. during short stops}	
Ν	B60L 53/34	2	Plug-like or socket-like devices specially	
			adapted for contactless inductive charging of	
			electric vehicles (positioning means for	
			charging devices using inductive energy	
N	D (01 52/25	2	transfer B60L 53/38)	
IN	BOOL 53/35	2	Means for automatically adjusting the	
			vehicles	
N	B60L 53/36	3	by positioning the vehicle	
N	B60L 53/37	3	using optical position determination, e.g.	
			using cameras	
N	B60L 53/38	3	specially adapted for charging by inductive	
			energy transfer	
Ν	B60L 53/39	4	with position-responsive activation of	
	D 102 D 100		primary coils	
Ν	B60L 53/50	1	Charging stations characterised by energy-	
N	DCOL 52/51	2	storage or power-generation means	
IN N	B60L 53/51	2	Wind driven generators	
N N	B60L 53/52	2	Batteries	
N	B60L 53/54	2	Fuel cells	
N	B60L 53/55	2	Capacitors	
N	B60L 53/56	2	Mechanical storage means, e.g. fly wheels	
N	B60L 53/57	2	Charging stations without connection to	
			power networks	
Q	B60L 53/60	1	Monitoring or controlling charging stations	B60L53/10, B60L53/60, B60L53/62, B60L53/66, B60L53/67, B60L53/68
Ν	B60L 53/62	2	in response to charging parameters, e.g.	
			current, voltage or electrical charge	
N	B60L 53/63	2	in response to network capacity	

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Type*	Symbol	Indent Level	Title	Transferred to [#]
		Number of	"CPC only" text should normally be	
		<u>dots (e.g. 0,</u>	enclosed in{curly brackets}**	
		<u>1, 2)</u>		
Ν	B60L 53/64	2	Optimising energy costs, e.g. responding to	
			electricity rates	
N	B60L 53/65	2	involving identification of vehicles	
N	B60L 53/66	2	Data transfer between charging stations and	
Ŋ	DOL FOUGE		vehicles	
N	B60L 53/665	3	{Methods related to measuring, billing or	
N	D60L 52/67	2	Controlling two or more charging stations	
IN N	DOUL 33/07	2	Off site monitoring or control of a remote	
1	B00L 33/08	2	control	
N	B60L 53/80	1	Exchanging energy storage elements, e.g.	
14	D00L 33/00	1	removable batteries	
N	B60L 55/00	0	Arrangements for supplying energy stored	
	200200/00	Ũ	within a vehicle to a power network, i.e.	
			vehicle-to-grid [V2G] arrangements	
Ν	B60L 58/00	0	Methods or circuit arrangements for	
			monitoring or controlling batteries or fuel	
			cells, specially adapted for electric vehicles	
N	B60L 58/10	1	for monitoring or controlling batteries	
Q	B60L 58/12	2	responding to state of charge [SoC]	B60L58/12, B60L58/15
Q	B60L 58/13	3	Maintaining the SoC within a determined	B60L58/13, B60L58/15
			range	
Q	B60L 58/14	3	Preventing excessive discharging	B60L58/14, B60L58/15
N	B60L 58/15	3	Preventing overcharging	
N	B60L 58/16	2	responding to battery ageing, e.g. to the	
			number of charging cycles or the state of	
N	DCOL 59/19	2	nealth [SOH]	
IN N	BOUL 38/18 B60L 58/10	2	Switching between serial connection and	
1	DOUL 30/19	5	parallel connection of battery modules	
N	B60L 58/20	3	having different nominal voltages	
N	B60L 58/21	3	having the same nominal voltage	
N	B60L 58/22	3	Balancing the charge of battery modules	
N	B60L 58/24	2	for controlling the temperature of batteries	
N	B60L 58/25	3	by controlling the electric load	
N	B60L 58/26	3	by cooling	
N	B60L 58/27	3	by heating	
N	B60L 58/30	1	for monitoring or controlling fuel cells	
N	B60L 58/31	2	for starting of fuel cells	
N	B60L 58/32	2	for controlling the temperature of fuel cells,	
			e.g. by controlling the electric load	
N	B60L 58/33	3	by cooling	
N	B60L 58/34	3	by heating	
Ν	B60L 58/40	1	for controlling a combination of batteries and fuel cells	
D	B60L2230/00	0	Charging station details	<administrative transfer<br="">to B60L53/30 INV></administrative>

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<u>Type</u> *	<u>Symbol</u>	Indent Level Number of	<u>Title</u> "CPC only" text should normally be	Transferred to [#]
		<u>dots (e.g. 0,</u>	enclosed in{curly brackets}**	
D	B60L2230/10	<u>1,2)</u> 1	Parts thereof	<administrative transfer<br="">to B60L53/30 INV></administrative>
D	B60L2230/12	2	Connection cables	<administrative transfer<br="">to B60L53/18 INV></administrative>
D	B60L2230/14	2	Contact less plugs	<administrative transfer<br="">to B60L53/34 INV></administrative>
D	B60L2230/16	2	Communication interfaces	<administrative transfer<br="">to B60L53/305 INV></administrative>
D	B60L2230/20	1	Power generation within charging stations	<administrative transfer<br="">to B60L53/50 INV></administrative>
D	B60L2230/22	2	by solar panels	<administrative transfer<br="">to B60L53/51 INV></administrative>
D	B60L2230/24	2	by wind generators	<administrative transfer<br="">to B60L53/52 INV></administrative>
D	B60L2230/26	2	by power stored mechanically, e.g. by fly wheel	<administrative transfer<br="">to B60L53/56 INV></administrative>
D	B60L2230/28	2	by fuel cells	<administrative transfer<br="">to B60L53/54 INV></administrative>
D	B60L2230/30	2	by batteries	<administrative transfer<br="">to B60L53/53 INV></administrative>
D	B60L2230/32	2	by capacitors	<administrative transfer<br="">to B60L53/55 INV></administrative>
D	B60L2230/34	2	Charging station being an island	<administrative transfer<br="">to B60L53/57 INV></administrative>
D	B60L2230/40	1	Remote controls for charging stations	<administrative transfer<br="">to B60L53/68 INV></administrative>

SUBCLASS B60S - SERVICING, CLEANING, REPAIRING, SUPPORTING, LIFTING, OR MANOEUVRING OF VEHICLES, NOT OTHERWISE PROVIDED FOR

<u>Type</u> *	<u>Symbol</u>	<u>Indent Level</u> <u>Number of dots</u> (e.g. 0, 1, 2)	<u><u>Title</u> <u>"CPC only" text should normally be enclosed</u> in {curly brackets}**</u>	Transferred to [#]
С	B60S 5/06	1	Supplying batteries to, or removing batteries from, vehicles (exchanging batteries for electric propulsion of vehicles B60L 53/80)	B60S5/06, B60L53/80

*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 <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).

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- 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. <u>New</u>, Modified or Deleted Warning(s)

SUBCLASS B60K - ARRANGEMENT OR MOUNTING OF PROPULSION UNITS OR OF TRANSMISSIONS IN VEHICLES; ARRANGEMENT OR MOUNTING OF PLURAL DIVERSE PRIME-MOVERS IN VEHICLES; AUXILIARY DRIVES FOR VEHICLES; INSTRUMENTATION OR DASHBOARDS FOR VEHICLES; ARRANGEMENTS IN CONNECTION WITH COOLING, AIR INTAKE, GAS EXHAUST OR FUEL SUPPLY OF PROPULSION UNITS IN VEHICLES

Type*	Location	Old Warning	<u>New/Modified Warning</u>
N	B60K 1/04		Group B60K 1/04 is impacted by reclassification into group B60L 53/80. Groups B60K 1/04 and B60L 53/80 should be considered in order to perform a complete search.

SUBCLASS B60L - SUBCLASS B60L - ELECTRIC EQUIPMENT OR PROPULSION OF ELECTRICALLY-PROPELLED VEHICLES; MAGNETIC SUSPENSION OR LEVITATION FOR VEHICLES; ELECTRODYNAMIC BRAKE SYSTEMS FOR VEHICLES, IN GENERAL (electric coupling devices combined with mechanical couplings of vehicles B60D 1/62; electric heating for vehicles B60H; transmitting drive from electric motors to ultimate propulsive elements in vehicles B60K; disposition of electric propulsion equipment, other than current collectors, in vehicles B60K; auxiliary generator drives on vehicles B60K; lighting for vehicles B60Q; vehicle brake control systems in general B60T; preventing wheel slip by reducing power in rail vehicles B61C; railway track circuits in general B61L; lighting in general F21; H05B; switches in general H01H; coupling devices for electric connections in general H01R; dynamo-electric machines H02K; electric converters H02M; starting, controlling, braking of electric machines or converters in general H02P; electric heating in general H05B)

<u>Type</u> *	Location	<u>Old Warning</u>	<u>New/Modified Warning</u>
Ν	B60L 3/00		Group B60L 3/00 is impacted by reclassification into groups
			B60L 58/00, B60L 58/10, B60L 58/12, B60L 58/13,
			B60L 58/14, B60L 58/15, B60L 58/16, B60L 58/18,
			B60L 58/19, B60L 58/20, B60L 58/21, B60L 58/22,
			B60L 58/24, B60L 58/25, B60L 58/26, B60L 58/27,
			B60L 58/30, B60L 58/31, B60L 58/32, B60L 58/33,
			B60L 58/34, and B60L 58/40. All groups listed in this
			Warning should be considered in order to perform a complete
			search.
Ν	B60L 3/0046		Group B60L 3/0046 is impacted by reclassification into groups
			B60L 58/00, B60L 58/10, B60L 58/12, B60L 58/13,
			B60L 58/14, B60L 58/15, B60L 58/16, B60L 58/18,
			B60L 58/19, B60L 58/20, B60L 58/21, B60L 58/22,
			B60L 58/24, B60L 58/25, B60L 58/26, B60L 58/27, and
			B60L 58/40. All groups listed in this Warning should be
			considered in order to perform a complete search.
Ν	B60L 3/0053		Group B60L 3/0053 is impacted by reclassification into groups
			B60L 58/00, B60L 58/30, B60L 58/31, B60L 58/32,
			B60L 58/33, B60L 58/34, and B60L 58/40. All groups listed in
			this Warning should be considered in order to perform a
			complete search.
Ν	B60L 9/00		Group B60L 9/00 is impacted by reclassification into group
			B60L 50/53. Groups B60L 9/00 and B60L 50/53 should be
			considered in order to perform a complete search.

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<u>Type</u> *	Location	Old Warning	<u>New/Modified Warning</u>
N	B60L 50/50		Group B60L 50/50 is impacted by reclassification into groups B60L 50/60, B60L 50/64, B60L 50/70, and B60L 50/75. All groups listed in this Warning should be considered in order to perform a complete search.
N	B60L 50/53		Group B60L 50/53 is incomplete pending reclassification of documents from group B60L 9/00. Groups B60L 9/00 and B60L 50/53 should be considered in order to perform a complete search.
N	B60L 50/60		Group B60L 50/60 is incomplete pending reclassification from group B60L 50/50. All groups listed in this Warning should be considered in order to perform a complete search.
N	B60L 50/64		Group B60L 50/64 is incomplete pending reclassification of documents from group B60L 50/50. Groups B60L 50/50 and B60L 50/64 should be considered in order to perform a complete search.
N	B60L 50/70		Group B60L 50/70 is incomplete pending reclassification from group B60L 50/50. All groups listed in this Warning should be considered in order to perform a complete search.
N	B60L 50/75		Group B60L 50/75 is incomplete pending reclassification from group B60L 50/50. Groups B60L 50/50 and B60L 50/75 should be considered in order to perform a complete search.
N	B60L 53/00		Group B60L 53/00 is impacted by reclassification into groups B60L 53/50, B60L 53/51, B60L 53/52, B60L 53/53, B60L 53/54, B60L 53/55, B60L 53/56, B60L 53/57, B60L 53/67, and B60L 53/68. All groups listed in this Warning should be considered in order to perform a complete search.
N	B60L 53/10		Group B60L 53/10 is incomplete pending reclassification of documents from group B60L 53/60. Groups B60L 53/60 and B60L 53/10 should be considered in order to perform a complete search.
N	B60L 53/12		Group B60L 53/12 is impacted by reclassification into groups B60L 53/122, B60L 53/124, and B60L 53/126. All groups listed in this Warning should be considered in order to perform a complete search.
N	B60L 53/122		Group B60L 53/122 is incomplete pending reclassification of documents from group B60L 53/12. Groups B60L 53/12 and B60L 53/122 should be considered in order to perform a complete search.
N	B60L 53/124		Group B60L 53/124 is incomplete pending reclassification of documents from group B60L 53/12. Groups B60L 53/12 and B60L 53/124 should be considered in order to perform a complete search.
N	B60L 53/126		Group B60L 53/126 is incomplete pending reclassification of documents from group B60L 53/12. Groups B60L 53/12 and B60L 53/126 should be considered in order to perform a complete search.
N	B60L 53/14		Group B60L 53/14 is impacted by reclassification into group B60L 53/18. Groups B60L 53/14 and B60L 53/18 should be considered in order to perform a complete search.

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Type*	Location	Old Warning	<u>New/Modified Warning</u>
N	B60L 53/18		Group B60L 53/18 is incomplete pending reclassification of documents from group B60L 53/14. Groups B60L 53/14 and B60L 53/18 should be considered in order to perform a complete search.
N	B60L 53/30		Group B60L 53/30 is impacted by reclassification into groups B60L 53/302, B60L 53/305, B60L 53/34, B60L 53/67, and B60L 53/68. Groups B60L 53/30, B60L 53/302, B60L 53/305, B60L 53/34, B60L 53/67, and B60L 53/68 should be considered in order to perform a complete search.
N	B60L 53/302		Group B60L 53/302 is incomplete pending reclassification of documents from group B60L 53/30. Groups B60L 53/30 and B60L 53/302 should be considered in order to perform a complete search.
N	B60L 53/305		Group B60L 53/305 is incomplete pending reclassification of documents from group B60L 53/30. Groups B60L 53/30 and B60L 53/305 should be considered in order to perform a complete search.
N	B60L 53/34		Group B60L 53/34 is incomplete pending reclassification of documents from group B60L 53/30. Groups B60L 53/30 and B60L 53/34 should be considered in order to perform a complete search.
N	B60L 53/50		Groups B60L 53/50-B60L 53/57 are incomplete pending reclassification of documents from group B60L 53/00. All groups listed in this Warning should be considered in order to perform a complete search.
N	B60L 53/60		Group B60L 53/60 is impacted by reclassification into groups B60L 53/10, B60L 53/62, B60L 53/66 B60L 53/67, and B60L53/68. All groups listed in this Warning should be considered in order to perform a complete search.
N	B60L 53/62		Group B60L 53/62 is incomplete pending reclassification of documents from groups B60L 53/60. All groups listed in this Warning should be considered in order to perform a complete search.
N	B60L 53/66		Group B60L 53/66 is incomplete pending reclassification of documents from group B60L 53/60. Groups B60L 53/60 and B60L 53/66 should be considered in order to perform a complete search.
N	B60L 53/67		Group B60L 53/67 is incomplete pending reclassification of documents from groups B60L 53/00, B60L 53/30, and B60L 53/60. All groups listed in this Warning should be considered in order to perform a complete search.
N	B60L 53/68		Group B60L 53/68 is incomplete pending reclassification of documents from groups B60L 53/00, B60L 53/30, and B60L 53/60. All groups listed in this Warning should be considered in order to perform a complete search.
N	B60L 53/80		Group B60L 53/80 is incomplete pending reclassification of documents from groups B60K 1/04 and B60S 5/06. Groups B60K 1/04, B60S 5/06, and B60L 53/80 should be considered in order to perform a complete search.

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<u>Type</u> *	Location	Old Warning	<u>New/Modified Warning</u>
N	B60L 58/00		Group B60L 58/00 is incomplete pending reclassification of documents from groups B60L 3/00, B60L 3/0046, B60L 3/0053, B60L 50/60, and B60L 50/70. All groups listed
			in this Warning should be considered in order to perform a complete search.
Ν	B60L 58/10		Group B60L 58/10 is incomplete pending reclassification of documents from groups B60L 3/00, B60L 3/0046, and B60L 50/60. All groups listed in this Warning should be considered in order to perform a complete search
N	B60L 58/12		Group B60L 58/12 is incomplete pending reclassification of documents from groups B60L 3/00 and B60L 3/0046. Group B60L 58/12 is also impacted by reclassification into group B60L 58/15. All groups listed in this Warning should be considered in order to perform a complete search.
N	B60L 58/13		Group B60L 58/13 is incomplete pending reclassification of documents from groups B60L 3/00 and B60L 3/0046. Group B60L 58/13 is also impacted by reclassification into group B60L 58/15. All groups listed in this Warning should be considered in order to perform a complete search.
N	B60L 58/14		Group B60L 58/14 is incomplete pending reclassification of documents from groups B60L 3/00 and B60L 3/0046. Group B60L 58/14 is also impacted by reclassification into group B60L 58/15. All groups listed in this Warning should be considered in order to perform a complete search.
N	B60L 58/15		Group B60L 58/15 is incomplete pending reclassification of documents from groups B60L 3/00, B60L 3/0046, B60L 58/12, B60L 58/13, and B60L 58/14. All groups listed in this Warning should be considered in order to perform a complete search.
N	B60L 58/16		Group B60L 58/16 is incomplete pending reclassification of documents from groups B60L 3/00 and B60L 3/0046. All groups listed in this Warning should be considered in order to perform a complete search.
N	B60L 58/18		Group B60L 58/18 is incomplete pending reclassification of documents from groups B60L 3/00 and B60L 3/0046. All groups listed in this Warning should be considered in order to perform a complete search.
N	B60L 58/19		Group B60L 58/19 is incomplete pending reclassification of documents from groups B60L 3/00 and B60L 3/0046. All groups listed in this Warning should be considered in order to perform a complete search.
N	B60L 58/20		Group B60L 58/20 is incomplete pending reclassification of documents from groups B60L 3/00 and B60L 3/0046. All groups listed in this Warning should be considered in order to perform a complete search.
N	B60L 58/21		Group B60L 58/21 is incomplete pending reclassification of documents from groups B60L 3/00 and B60L 3/0046. All groups listed in this Warning should be considered in order to perform a complete search

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<u>Type</u> *	Location	Old Warning	<u>New/Modified Warning</u>
N	B60L 58/22		Group B60L 58/22 is incomplete pending reclassification of documents from groups B60L 3/00 and B60L 3/0046. All groups listed in this Warning should be considered in order to perform a complete search.
N	B60L 58/24		Group B60L 58/24 is incomplete pending reclassification of documents from groups B60L 3/00 and B60L 3/0046. All groups listed in this Warning should be considered in order to perform a complete search.
N	B60L 58/25		Group B60L 58/25 is incomplete pending reclassification of documents from groups B60L 3/00 and B60L 3/0046. All groups listed in this Warning should be considered in order to perform a complete search.
N	B60L 58/26		Group B60L 58/26 is incomplete pending reclassification of documents from groups B60L 3/00 and B60L 3/0046. All groups listed in this Warning should be considered in order to perform a complete search.
N	B60L 58/27		Group B60L 58/27 is incomplete pending reclassification of documents from groups B60L 3/00 and B60L 3/0046. All groups listed in this Warning should be considered in order to perform a complete search.
N	B60L 58/30		Group B60L 58/30 is incomplete pending reclassification of documents from groups B60L 3/00, B60L 3/0053, and B60L 50/70. All groups listed in this Warning should be considered in order to perform a complete search.
N	B60L 58/31		Group B60L 58/31 is incomplete pending reclassification of documents from groups B60L 3/00 and B60L 3/0053. All groups listed in this Warning should be considered in order to perform a complete search.
N	B60L 58/32		Group B60L 58/32 is incomplete pending reclassification of documents from groups B60L 3/00 and B60L 3/0053. All groups listed in this Warning should be considered in order to perform a complete search.
N	B60L 58/33		Group B60L 58/33 is incomplete pending reclassification of documents from groups B60L 3/00 and B60L 3/0053. All groups listed in this Warning should be considered in order to perform a complete search.
N	B60L 58/34		Group B60L 58/34 is incomplete pending reclassification of documents from groups B60L 3/00 and B60L 3/0053. All groups listed in this Warning should be considered in order to perform a complete search.
N	B60L 58/40		Group B60L 58/40 is incomplete pending reclassification of documents from groups B60L 3/00, B60L 3/0046, B60L 3/0053, and B60L 50/75. All groups listed in this Warning should be considered in order to perform a complete search.

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SUBCLASS B60S - SERVICING, CLEANING, REPAIRING, SUPPORTING, LIFTING, OR MANOEUVRING OF VEHICLES, NOT OTHERWISE PROVIDED FOR

<u>Type</u> *	Location	Old Warning	<u>New/Modified Warning</u>
N	B60S 5/06		Group B60S 5/06 is impacted by reclassification into group B60L 53/80. Groups B60S 5/06 and B60L 53/80 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. <u>New</u>, Modified or Deleted Note(s)

SUBCLASS B60L - ELECTRIC EQUIPMENT OR PROPULSION OF ELECTRICALLY-PROPELLED VEHICLES; MAGNETIC SUSPENSION OR LEVITATION FOR VEHICLES; ELECTRODYNAMIC BRAKE SYSTEMS FOR VEHICLES, IN GENERAL (electric coupling devices combined with mechanical couplings of vehicles B60D 1/62; electric heating for vehicles B60H; transmitting drive from electric motors to ultimate propulsive elements in vehicles B60K; disposition of electric propulsion equipment, other than current collectors, in vehicles B60K; auxiliary generator drives on vehicles B60K; lighting for vehicles B60Q; vehicle brake control systems in general B60T; preventing wheel slip by reducing power in rail vehicles B61C; railway track circuits in general B61L; lighting in general F21; H05B; switches in general H01H; coupling devices for electric connections in general H01R; dynamo-electric machines H02K; electric converters H02M; starting, controlling, braking of electric machines or converters in general H02P; electric heating in general H05B)

Type*	Location	Old Note	New/Modified Note
N	B60L50/64		This group <u>covers</u> adaptation of battery structures of electric
			vehicles, e.g. integration into control or safety systems,
			crash-resistant casings or vibration-damping means.
N	B60L50/72		This group <u>covers</u> adaptation of fuel cell structures of
			electric vehicles, e.g. integration into control or safety
			systems, crash-resistant casings or vibration-damping means.
N	B60L58/00		This group <u>covers</u> the monitoring of the operating state of
			batteries or fuel cells in combination with controlling the
			propulsion in response to the detected variables of the state.

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. A. DEFINITIONS (new)

Insert the following <u>NEW</u> definitions.

B60L 50/00

Definition statement

This place covers:

Electric vehicles using electric energy stored or provided in various forms within the vehicle. The electric energy can be provided by engine-driven generators, stored in electrical cells like batteries or fuel cells or converted from mechanically stored energy. This subgroup also covers electric vehicles that use auxiliary electric power supplies like capacitors.

References

Limiting references

This place does not cover:

Electric propulsion with power supply from forces of nature, e.g. sun	B60L 8/00
or wind	
Electric propulsion for monorail vehicles, suspension vehicles or	B60L 13/00
rack railways	

Informative references

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

Electrically driven model locomotives	A63H 19/10
Arrangements or mounting of plural diverse prime-movers for	B60K 6/20
mutual or common propulsion	
Control systems specially adapted for hybrid vehicles if propulsion	B60W 20/00
other than electric is used to drive the wheels	

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B60L 50/10

Definition statement

This place covers:

Electric vehicles using an engine-driven generator as only power supply, e.g. diesel electric locomotives.

Motors and generators are being considered as being of type AC or DC according to the form of the current used in the motor or generator.

References

Informative references

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

Vehicles with additional power supply	B60L 50/61
The control of combustion engines is covered in	F02D
Control of engine driven generators	F02D 29/06
Starting engines by motor/generator	F02N 11/04
Charging batteries by a generator driven by a prime mover other	H02J 7/1415
than motor of the vehicle	

B60L 50/16

Definition statement

This place covers:

Vehicles, where, under certain conditions, power is directly delivered from the engine to the wheels. This includes also electric equipment for hybrid vehicles unless they are conjointly controlled with the combustion engine.

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References

Informative references

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

Conjoint control of vehicle sub-units of different type or different	B60W 10/00
function, including control of electrical propulsion units in case the	
vehicle is not purely electrically-propelled.	
Control systems specially adapted for hybrid vehicles. i.e. vehicles	B60W 20/00
having two or more prime movers of more than one type, e.g.	
electrical and internal combustion motors, all used for propulsion of	
the vehicle	

Special rules of classification

Classification should additionally be made:

- in group B60L 53/00 if aspects of charging are relevant (e.g. plug-in hybrid),
- in group B60L 50/60 if battery related problems are relevant, and
- in group B60L 50/70 if fuel cell related aspects are relevant.

B60L 50/20

Definition statement

This place covers:

Electric vehicles using human power in addition to other sources of electrical energy

References

Informative references

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

Construction of electrically powered cycles B62M 6/40

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B60L 50/30

Definition statement

This place covers:

Electrical energy is converted into mechanical energy and stored mechanically. For later use it is reconverted into electrical energy.

B60L 50/40

Definition statement

This place covers:

Electric vehicles using capacitors in addition to other sources of electrical energy, e.g. to accommodate short-term power fluctuations. The capacitors should explicitly be meant to provide propulsion energy.

B60L 50/50

References

Informative references

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

Primary cells	H01M 6/00
Fuel cells	H01M 8/00
Secondary cells	H01M 10/00

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B60L 50/51

Definition statement

This place covers:

Vehicles supplied with electric energy from an electrical cell and propelled by AC motors.

References

Informative references

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

Electric vehicles with an additional external power supply	B60L 50/53
Electric vehicles powered by fuel cells	B60L 50/70

B60L 50/52

Definition statement

This place covers:

Vehicles supplied with electric energy from an electrical cell and propelled by motors driven by a DC current

References

Informative references

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

Electric vehicles with an additional external power supply	B60L 50/53
Electric vehicles powered by fuel cells	B60L 50/70

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B60L 50/53

Definition statement

This place covers:

Vehicle supplied with electric energy from an electrical cell and additionally from the outside mostly in the form of an overhead power line.

References

Informative references

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

Electric vehicles powered exclusively by external power supply	B60L 9/00
Charging electric vehicles	B60L 53/00

B60L 50/60

Definition statement

This place covers:

- Monitoring the operating state of the batteries
- Controlling the drive in dependence of detected batteries variables.

The term "batteries" is used as well for accumulators.

References

Limiting references

This place does not cover:

Electric vehicles powered by both fuel cells and batteries	B60L 50/75
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Informative references

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

Charging or depolarising batteries	6	H02J 7/00

B60L 50/61

Definition statement

This place covers:

Electric vehicles using a range extender to increase the operating range of the battery, e.g. series hybrid vehicles.

References

Informative references

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

Electric vehicles using propulsion power supplied by engine-driven	B60L 50/10
generators, e.g. generators driven by combustion engines	

B60L 50/62

Definition statement

This place covers:

The engine-driven generator provides not enough power to supply the maximum output power of the vehicle. If only powered by the range extender, this kind of vehicle has a reduced power output.

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B60L 50/66

Definition statement

This place covers:

Arrangements or location of batteries only in so far as specially adapted for the drive train of electric vehicles.

B60L 50/70

Definition statement

This place covers:

Electric vehicles powered by fuel cells.

References

Limiting references

This place does not cover:

Electric vehicles powered by both fuel cells and batteries	B60L 50/75

Informative references

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

Control of fuel cells	H01M 8/04298
Control of failure or abnormal functionality of fuel cells	H01M 8/04664
Indirect fuel cell; Redox flow type battery	H01M 8/20,
	H01M 8/188
Grouping of fuel cells into batteries	H01M 8/24

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B60L 50/71

Definition statement

This place covers:

Arrangements or locations of fuel cells only in so far as specially adapted for the drive train of electric vehicles.

B60L 50/72

Definition statement

This place covers:

Details of fuel cells only in so far as specially adapted for the drive train of electric vehicles.

References

Informative references

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

|--|

B60L 50/90

Definition statement

This place covers:

Electric vehicles using electrical energy provided by sources not covered by groups B60L 50/10 - B60L 50/50, e.g. gas turbine driven generators, radioisotope thermoelectric generators (RTG) or energy converted from energy stored pneumatically or hydraulically.

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References

Informative references

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

Arrangement or mounting of plural diverse prime-movers for HEV	B60K 6/28
characterised by the electric energy storing means	
Detecting, eliminating, remedying or compensating for drive train	B60L 3/0046
abnormalities relating to electric energy storage systems	

B60L 53/00

Definition statement

This place covers:

Charging and discharging of electric vehicles.

Aspects of

- charging converter
- connection means
- automatic connection
- exchange of energy storage elements
- charging stations
- Methods for
- identification of vehicles
- determination of the supplied energy
- measuring, billing and payment
- availability of energy.

The vehicles are normally not moving during the charging process. Exceptionally an inductive energy transfer may occur during the ride.

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References

Informative references

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

Optimisation of energy with GPS or similar systems	B60L 15/2045
Power supply (e.g. charging) of vehicles whilst in motion	B60M
Power supply of vehicles whilst in motion using intermitting contact	B60M 1/36
points along the line	
Power supply for vehicles of special types using stored power	B60M 7/003
Inductive coupling	H01F 38/14
Charging batteries per se	H02J 7/00
Power conversion systems per se	H02M
Connectors per se	H01R
Arrangements for secret or secure communication	H04L 9/00

B60L 53/11

Definition statement

This place covers:

Methods for charging vehicles considerably faster than normal charge, e.g. less than 30 minutes, or also called "fast charging" or "mode 4".

B60L 53/12

Definition statement

This place covers:

The energy needed to propel the vehicle is transmitted inductively from the station to the vehicle. Often, but not necessarily, the primary inductances are embedded in the floor. The vehicle normally is stopped during the charging process.

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References

Informative references

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

Magnetic suspension or levitation for vehicles	B60L 13/04
Inductive couplings	<u>H01F 38/14</u>
Circuit arrangements for charging batteries from ac-mains using	H02J 7/025
non-contact coupling, e.g. inductive, capacitive	
Inductive nearfield transmission for power transfer	H04B 5/0037

B60L 53/14

Definition statement

This place covers:

The connectors are fixed to a station or to the vehicle. The vehicle must be stopped in order to receive any charge. Communication between the station and the vehicle may be established.

References

Informative references

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

Current collectors	B60L 5/00
Charging stations	B60L 53/30
Connectors per se	H01R
Installation of electric cables in vehicles	H02G 3/00

Synonyms and Keywords

In patent documents, the following abbreviations are often used:

Pilot	Wire used for communication

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B60L 53/20

Definition statement

This place covers:

Measures and means for charging or discharging electric vehicles distinguished by the use of converters.

B60L 53/22

Definition statement

This place covers:

Details of converters and inverters only in so far as specially adapted for charging or discharging electric vehicles.

References

Informative references

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

Converters and inverters for vehicle drive trains	B60L 15/007
Converters and inverters per se	H02M

B60L 53/24

Definition statement

This place covers:

The propulsion converter is used as an onboard charger eliminating the need to provide a separate onboard charger.

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B60L 53/30

Definition statement

This place covers:

Charging stations for electric vehicles and their interaction/communication with the vehicle as well as with the grid supplying the station are classified here. Vehicle recognition, user recognition, theft of energy prevention, measurement of transferred energy, billing of the customer, availability of charging slots for the correspondent vehicle types, recognition of battery types.

References

Informative references

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

Inductive energy transfer	B60L 53/12
Conductive energy transfer	B60L 53/20
Exchange of energy storage elements	B60L 53/80
Optimisation of energy and GPS or similar system	B60L15/20
Power lines of special types for vehicles using stored power	B60M 7/003
Building structures for parking	E04H 6/00
Arrangements for road pricing	G07B 15/00
Vending machines other than coins	G07F 7/00
Coin-freed apparatus with meter-controlled dispensing electricity	G07F 15/003
Traffic control systems for road vehicles	G08G 1/00
Automatic parking traffic control systems	G08G 1/065
Fleet management	G08G 1/20
Circuits for charging batteries per se, e.g. for batteries removed	H02J 7/00
from the vehicle	
Charging stations for mobile units	H02J 7/0027
Using battery charging as network buffer	H02J 7/34
Arrangements for secret or secure communication	H04L 9/00

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B60L 53/31

Definition statement

This place covers:

Charging installations for electric vehicles not integrated in a building. Typically they are designed for a public environment. They can be of a stand-alone type, e.g. columns or integrated into other street furniture. Means for energy theft prevention associated with charging columns.

B60L 53/35

Definition statement

This place covers:

Automatic positioning of the plug, the inductive transfer device or the electric vehicle in order to automatically connect to an electric power supply to the vehicle.

B60L 53/36

Definition statement

This place covers:

The vehicle is positioned in order to allow automatic connection of a plug or charging device. The positioning can be e.g. mechanical by forcing the car in the right position, optically by guiding the driver or by automatic repositioning of the car.

B60L 53/38

Definition statement

This place covers:

Automatic positioning of the inductive charging device or the vehicle for inductively charging electric vehicles.

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References

Informative references

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

Inductive charging of electric vehicles per see	B60L 53/12

Special rules of classification

If the vehicle is positioned, the document should also be classified in B60L 53/36.

B60L 53/39

Definition statement

This place covers:

The position of the vehicle to be charged is detected and primary coils are activated selectively to maximise energy transfer. The primary coils can be integrated in the floor surface or in a separate charging device. The primary coils can also be distributed along the road.

Special rules of classification

If the primary coils are distributed along the road, documents should also be classified in group B60L 53/32.

Synonyms and Keywords

In patent documents, the following abbreviations are often used:

primary coil	the coil of an inductive transfer device that is stationary and part of the charging installation
secondary coil	the coil of an inductive transfer device that is integrated in an electric vehicle

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B60L 53/60

Definition statement

This place covers:

Methods ruling the exchange of energy and the respective data for charging an electric vehicle. Interaction or communication between the vehicle and the charging station or the electricity grid, e.g. availability of charging slots for the correspondent vehicle types.

References

Informative references

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

Data exchange for battery identification	H02J 7/0004
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B60L 53/63

Definition statement

This place covers:

Methods for adapting charging of electrical vehicles to the supply possibilities of the electricity grid, e.g. depending on network stability or limits of the network ability to provide power.

B60L 53/64

Definition statement

This place covers:

Methods for optimising the cost of charging an electric vehicle, e.g. by adapting time or location depending on available energy rates.

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B60L 53/65

Definition statement

This place covers:

Methods that allow the identification of an electric vehicle including recognition of vehicle or battery type.

B60L 53/665

Definition statement

This place covers:

Methods for measuring energy transferred to and from the vehicle.

Registration, billing and payment associated with the transfer of energy.

B60L 53/80

Definition statement

This place covers:

Empty or partially empty or faulty batteries, super-capacitors or similar energy carriers are physically removed from the vehicle and replaced with charged ones. An energy carrier may also be the electrolyte that is exchanged exclusively.

References

Informative references

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

Supplying batteries or removing batteries from vehicles	B60S 5/06
Cells working by exchange of electrolyte, e.g. redox flow cells	H01M 8/188

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B60L 55/00

Definition statement

This place covers:

Methods for providing stored energy from the vehicle to the grid. The vehicles serve, e.g. as a net-buffer to stabilise the electricity net.

References

Informative references

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

Arrangements for balancing of the load in a network by storage of	H02J 3/32
energy using batteries with converting means in general	

B60L 58/12

Definition statement

This place covers:

The state of charge [SoC/SOC] of the battery is determined and influences the control of the vehicle.

References

Informative references

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

Indicating measured values, displays	G01D
Testing/monitoring SOC per se	G01R 31/382
Testing electrical conditions of batteries	G01R 31/387

Synonyms and Keywords

In patent documents, the following abbreviations are often used:

SOC	State of charge

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B60L 58/13

Definition statement

This place covers:

The control of the electric vehicle is required to keep the SOC within particular range or window (e.g. between 30% and 70%) so as, for example, increase the life span of the battery.

B60L 58/14

Definition statement

This place covers:

Methods for prevention of a deep discharge of the battery to avoid damage to or destruction of the battery.

B60L 58/16

Definition statement

This place covers:

Monitoring the aging of the battery and control methods depending on the established data.

B60L 58/18

Definition statement

This place covers:

The battery is split in different groups of cells to achieve a desired performance, e.g. using a part for traction purposes whilst another part is recharged.

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B60L 58/19

Definition statement

This place covers:

The battery is switched between series and parallel connection in order to achieve a desired performance.

References

Informative references

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

B60L 58/20

Definition statement

This place covers:

The interaction of batteries with different voltages, e.g. traction battery and axillary battery.

B60L 58/21

Definition statement

This place covers:

Methods and means to control battery sets having the same nominal voltage.

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B60L 58/22

Definition statement

This place covers:

Methods or means to equalise the charge state or voltage of a group of battery cells to increase capacity and life span of the battery.

B60L 58/25

Definition statement

This place covers:

The control of the electric loads is influenced in order to control the battery temperature, e.g. by restricting the maximum drive power or by cutting of auxiliary drives.

B60L 58/31

Definition statement

This place covers:

Powering up an electric vehicle using the start of the fuel cell including the fuel cell itself.

B60L 58/32

Definition statement

This place covers:

Control is affected upon the fuel cell temperature. For example, the control of the electric loads is influenced in order to control the fuel cell temperature, e.g. by restricting the maximum drive power or by cutting of auxiliary drives.

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2. A. DEFINITIONS (Modified)

B60K 1/04

Limiting references

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

Cooling of the batteries using HVAC of the vehicle	B60H 1/00278
Fixing of the housing of the batteries to the vehicle	H01M 2/1083
if the invention is on the housing of the batteries	
Fuel cells	H01M 8/00
Heating of fuel cell	H01M 8/04007
Heating and cooling of batteries	H01M 10/60
Heating and cooling of batteries in the vehicle	H01M 10/625

Insert: The following <u>new</u> row in the Limiting references table.

Exchanging batteries for electric propulsion of	B60L 53/80
vehicles	

Informative references

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

Batteries per se	H01M
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Insert: The following replacement row in the Informative references table.

Electrochemical generators per se	H01M
-----------------------------------	------

<u>Replace</u>: In the existing Informative references table, the following symbols: "B60L 11/1809" <u>with</u> "B60L 53/00" and "B60L 11/1822" <u>with</u> "B60L 53/80" (as done in the two rows below).

Connecting elements for charging the batteries	B60L 53/00
Exchange of the energy storage elements for	B60L 53/80
electric vehicles	

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Insert: The following <u>six new</u> rows in the Informative references table.

Cooling of the batteries using HVAC of the vehicle	B60H 1/00278
Fixing of the housing of the batteries to the vehicle if the invention is on the housing of the batteries	H01M 2/1083
Fuel cells	H01M 8/00
Heating of fuel cell	H01M 8/04007
Heating and cooling of batteries	H01M 10/60
Heating and cooling of batteries in the vehicle	H01M 10/625

Special rules of classification

<u>Replace</u>: The existing text in the Special rules of classification section with the text shown below.

If there exists a second prime mover, e.g. an internal combustion engine (ICE) or hydraulic accumulator, classification is additionally made in B60K 6/00.

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B60L

Relationships with other classification places

<u>Replace</u>: <u>All of the existing text</u> in the Relationships with other classification places section with the new text shown below.

This subclass is the general place for subject-matter relating to the propulsion of electrically-propelled vehicles, for control of the propulsion and for collecting electrical power therefor.

However conjoint control of two or more vehicle subunits, one of which may be an electrical propulsion unit, and subject-matter relating to control of hybrid vehicles comprising an internal-combustion motor and an electric motor, are covered in subclass B60W.

Further subject-matter relating to arrangements or mounting of electrical propulsion units, electric gearings or auxiliary drives in vehicles, are covered in subclass B60K. That includes also the transmission of drive from electric motors to the ultimate propulsive elements in vehicles and the disposition of electric propulsion equipment, other than current collectors.

This subclass is also the application-oriented place for subject-matter relating to electro-dynamic or dynamo-electric braking systems for vehicles. The function-oriented places for such systems are subclasses H02P and H02K.

Therefore, this subclass covers all vehicles except those restricted to one of the following types of vehicles: rail vehicles, waterborne vessels, aircraft, space vehicles, hand carts, cycles, animal-drawn vehicles, and sledges, which are covered by the relevant subclasses of B61- B64.

Thus, this subclass covers also:

- vehicular characteristics which are common to more than one of the above listed types;
- certain characteristics restricted to automobiles, road or crosscountry trailers.

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The following exceptions to the above should be noted:

- Subclass B60B or B60C cover all vehicle wheels and tyres, except wheels for roller skates A63C 17/22, wheels for model railway vehicles A63H 19/22, and special adaptations of wheels or tyres for aircraft B64C 25/36.
- Subclass B60C covers the connection of valves to inflatable elastic bodies in general, and in this respect it is not limited to vehicles.
- Subclass B60L covers certain electric equipment of all electrically-propelled vehicles.
- Subclass B60M covers certain power supply for, but external to, any kind of electrically-propelled vehicle.
- Subclass B60R covers safety belts or body harnesses used in all types of land vehicles.
- Subclass B60S relates to all kinds of vehicles, except the servicing of rail locomotives B61K11/00, ground equipment for aircraft B64F, or cleaning apparatus peculiar to waterborne vessels B63B 57/00, B63B 59/00.
- Subclass B60T covers brake control systems of general applicability, and in this respect it is not limited to vehicles. It also covers rail-vehicle power-brake systems and some other features of rail-vehicle brake systems.

Limiting references

Insert: In the existing Limiting references table, the following two new rows.

Preventing wheel slip by reducing power in rail vehicles	B61C 15/08
Dynamo-electric machines	H02K

<u>Replace</u>: In the existing Limiting references table, the symbols: "B60D 1/62" <u>with</u>

"B60D 1/64" and "B60K 6/00" with "B60K 6/20" (as done in the two rows below).

Electric coupling devices combined with	B60D 1/64
mechanical couplings of vehicles	
Arrangement or mounting of plural diverse prime	B60K 6/20
movers for mutual or common propulsion, e.g.	
hybrid propulsion systems comprising electric	
motors and internal combustion engines	

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<u>Delete</u>: From the existing Limiting references table, the following row.

Starting, controlling, braking of electric machines	H02P
or converters in general	

<u>Replace</u>: In the Limiting references table, the <u>deleted</u> row with the <u>new</u> row below.

Control or regulation of electric motors	H02P

<u>Delete</u>: From the existing Limiting references table, the following <u>seven</u> rows.

Motor driven wheel chairs	A61G 5/04
Arrangement of signalling or lighting devices, the	B60Q
mounting or supporting thereof or circuits	
therefore, for vehicles in general	
Power-driven ground-engaging fittings for	B60S 9/205
manoeuvring the vehicle	
Conjoint control of vehicle sub-units of different	B60W 10/00
type or different function, including control of	
electrical propulsion units in case the vehicle is	
not purely electrically-propelled.	
Control systems specially adapted for hybrid	B60W 20/00
vehicles. i.e. vehicles having two or more prime	
movers of more than one type, e.g. electrical and	
internal combustion motors, all used for propulsion	
of the vehicle	
Construction of electrically-powered cycles	B62M 6/40
Construction of dynamo-electric brakes	H02K 49/00

Informative references

Replace:In the Informative references table, the first occurrence of "H05B" with"H05B 31/00 – H05B 41/00" and replace in the last row the secondoccurrence of "H05B" with"H95B 1/00 –H05B 11/00" (as already done in
the two rows below).

Lighting in general	F21,
	1105D 31/00 - 1105D 41/00
Electric heating in general	H05B 1/00 – H05B 11/00

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Insert: In the Informative references table, the following <u>nine new</u> rows.

Motor driven wheel chairs	A61G 5/04
Arrangement of signalling or lighting devices, the	B60Q
mounting or supporting thereof or circuits	
therefor, for vehicles in general	
Power-driven ground-engaging fittings for	B60S 9/205
manoeuvring the vehicle	
Vehicle brake control systems in general	B60T
Conjoint control of vehicle sub-units of different	B60W 10/00
type or different function, including control of	
electrical propulsion units in case the vehicle is	
not purely electrically-propelled	
Control systems specially adapted for hybrid	B60W 20/00
vehicles. i.e. vehicles having two or more prime	
movers of more than one type, e.g. electrical and	
internal combustion motors, all used for	
propulsion of the vehicle	
Construction of cycles	B62K
Rider propulsion of wheeled vehicles	B62M
Construction of electrically-powered cycles	B62M 6/40

Special rules of classification

<u>Delete</u>: The <u>entire</u> Special rules of classification section: heading and all text.

Glossary of terms

Insert: The following <u>four new</u> rows in the Glossary of terms table.

battery	generic term covering primary and secondary
primary cell	electrochemical generator in which the cell energy
	is present in chemical form and is not regenerated.
secondary cell	accumulator receiving and supplying electrical
	energy by means of reversible electrochemical
	reactions.
fuel cell	electrochemical generator wherein the reactants are
	supplied from outside.

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<u>Replace</u>: The following five terms shown in the <u>first column</u> of the Glossary of terms table (the <u>first letter</u> in each term was changed to lower case — as already done in the table below).

electrodynamic braking system	An electric machine that acts as a brake. Braking is accomplished by reversing the electric fields on the machine, effectively turning it into a generator. The usage of the generated power, either in useful applications or as dissipation of heat, restrains the motor-generator and provides a braking action. As such, this term is virtually coterminous with "dynamo-electric braking system" (see below). However the term "electrodynamic" on its own is broader and less clear than the term "dynamo- electric". It means "pertaining to electric current, electricity in motion and the effects of magnetism and induction", and could theoretically encompass electrical devices other than dynamo-electric devices.
dynamo-electric braking system	A dynamo-electric machine is a device for converting electrical energy into mechanical energy or mechanical energy into electrical energy or combinations thereof, which involve electromagnetic induction. In respect of brakes, a braking effect could be produced by converting the kinetic energy of a vehicle into electrical energy, for dissipation (e.g. by resistors or as eddy-currents) or for storage (e.g. by regenerative braking). Alternatively, electrical energy could be supplied to the device to drive it into reverse, thereby producing a braking effect.
hybrid vehicle	Vehicle having two or more prime movers of more than one type connected with the driven wheels, e.g. electrical and internal combustion motors, and that are either singularly or in combination used for propulsion of the vehicle.
range extender	Device to extend the range of an electric vehicle supplied by a traction battery. Most of the time the term refers to an engine-driven generator. It can however also refer to fuel cells or additional energy storage for electrical energy. Range extenders have generally a lower power than the maximum output of the vehicle.

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prime mover	A machine that transforms energy from thermal, electrical or pressure form to mechanical form,
	typically an engine or turbine.

<u>Delete</u>: The following <u>two</u> rows from the Glossary of terms table.

Electric vehicle	Vehicles propelled by electric motors, these motors being mechanically connected to the drive wheels. This includes also vehicles with engine driven generators sometimes referred to a as serial hybrid vehicles
Plug in Hybrid	Hybrid vehicle which utilizes rechargeable batteries that can be restored to full charge by connecting a plug or other connection means to an external electric power source

<u>Replace</u>: The two rows deleted in the Glossary of terms table, with the following <u>revised</u> rows.

electric vehicle	Vehicle propelled by electric motor(s), these motors being mechanically connected to the drive wheels. This definition embraces also vehicles with engine-driven generators, sometimes referred to a as serial hybrid vehicles.
plug-in hybrid vehicle	Hybrid vehicle which uses rechargeable batteries that can be restored to full charge by connecting a plug or other connection means to an external electric power source.

<u>Delete</u>: From the Glossary of terms table, the following <u>four</u> rows.

AC motor	Motor driven by ac
AC generator	Generator providing ac
DC motor	Motor driven by dc
DC generator	Generator providing dc

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B60L 3/00

Insert: The following <u>new</u> section: Limiting references.

Limiting references

This place does not cover:

Methods or circuit arrangements for monitoring or	B601 58/00
controlling batteries or fuel cells, specially adapted	DOOL 30/00
for electric vehicles	

B60L 3/0046

Definition statement

Insert: A period after "capacitor" in the Definition statement section (as shown below).

Methods and devices for detecting or overcoming abnormalities associated with the electric energy storage e.g. battery or capacitor.

Limiting references

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

Limiting references

This place does not cover:

B60L 11/1851	Monitoring the battery	B60L 11/1851
--------------	------------------------	--------------

Informative references

Insert: The following <u>new</u> row in the Informative references table.

Monitoring or controlling batteries in electric	B601 58/10
vehicles	DOOL 30/10

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B60L 3/0053

Limiting references

Delete: The entire Limiting references section: heading, preamble, and table.

Limiting references

This place does not cover:

Monitoring or controlling fuel cells in electric	B60L 11/1881
vehicles	

Insert: The following <u>new</u> section: Informative references.

Informative references

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

Monitoring or controlling fuel cells in electric	B60L 58/30
vehicles	

B60L 8/00

Limiting references

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

Limiting references

This place does not cover:

Supplying electric power to auxiliary equipment	B60L 1/00
of electric vehicles	

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Informative references

Insert: The following <u>new</u> row in the Informative references section.

Supplying electric power to auxiliary equipment	B60L 1/00
of electric vehicles	

B60L 9/00

Limiting references

Insert: The following two new rows in the Limiting references table.

Electric propulsion for monorail vehicles, suspension vehicles or rack railways	B60L 13/00
In combination with an external power supply, e.g. from overhead contact lines	B60L 50/53

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

Electric propulsion with power supply from force of nature	B60L 8/00
Electric vehicles using electrical cells in combination with power lines	B60L 11/1801
Magnetic suspension or levitation	B60L 13/04

B60S 5/06

Definition statement

<u>Replace</u>: The statement in the Definition statement section with the statement below.

Battery exchange service stations.

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Relationships with other classification places

<u>Replace</u>: In the Relationships with other classification places section, the existing text: *Documents related to service stations…classified in B60L 11/18*, with the text below.

Service stations with an automatic system for recharging batteries, without battery exchange, are classified in B60L 50/50.

Insert: The following <u>new</u> section: Limiting references.

Limiting references

This place does not cover:

Exchanging batteries for electric propulsion of	B60L 53/80
vehicles	

Informative references

<u>Delete</u>: The following <u>two</u> rows in the Informative references table.

Charging of batteries	B60L 11/18
Batteries in general	H01M

Replace: The two rows deleted with the following two updated rows.

Charging of batteries	B60L 50/50
Electrochemical generators	H01M

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2. B. DEFINITIONS QUICK FIX

Symbol	Location of change	Existing reference	Action; New symbol; New text
	(e.g., section title)	symbol or text	
			Delete complete definition
B60L 11/00			Delete complete definition.
BOUL 11/002			Delete complete definition.
B60L 11/005			Delete complete definition.
B60L 11/007			Delete complete definition.
B60L 11/02			Delete complete definition.
B60L 11/123			Delete complete definition.
B60L 11/126			Delete complete definition.
B60L 11/14			Delete complete definition.
B60L 11/16			Delete complete definition.
B60L 11/18			Delete complete definition.
B60L 11/1801			Delete complete definition.
B60L 11/1803			Delete complete definition.
B60L 11/1805			Delete complete definition.
B60L 11/1809			Delete complete definition.
B60L 11/1811			Delete complete definition.
B60L 11/1812			Delete complete definition.
B60L 11/1814			Delete complete definition.
B60L 11/1816			Delete complete definition.
B60L 11/1818			Delete complete definition.
B60L 11/182			Delete complete definition.
B60L 11/1822			Delete complete definition.
B60L 11/1824			Delete complete definition.
B60L 11/1825			Delete complete definition.
B60L 11/1827			Delete complete definition.
B60L 11/1829			Delete complete definition.
B60L 11/1831			Delete complete definition.
B60L 11/1833			Delete complete definition.
B60L 11/1835			Delete complete definition.
B60L 11/1838			Delete complete definition
B60L 11/184			Delete complete definition
B60L 11/1842			Delete complete definition
B60L 11/1844			Delete complete definition
B60L 11/1846			Delete complete definition
B60L 11/18/8			Delete complete definition.
B60L 11/185			Delete complete definition
B60L 11/1851			Delete complete definition.
B60L 11/1031			Delete complete definition.
DOUL 11/1003			
DOUL 11/1000			Delete complete definition.
DOUL 11/185/			
BOUL 11/1859			Delete complete definition.
B60L 11/1861			Delete complete definition.

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B60L 11/1862	Delete complete definition.
B60L 11/1864	Delete complete definition.
B60L 11/1866	Delete complete definition.
B60L 11/1868	Delete complete definition.
B60L 11/187	Delete complete definition.
B60L 11/1872	Delete complete definition.
B60L 11/1877	Delete complete definition.
B60L 11/1881	Delete complete definition.
B60L 11/1883	Delete complete definition.
B60L 11/1885	Delete complete definition.
B60L 11/1887	Delete complete definition.
B60L 11/1888	Delete complete definition.
B60L 11/189	Delete complete definition.
B60L 11/1896	Delete complete definition.

NOTES:

- 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.

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3. REVISION CONCORDANCE LIST (RCL)

Type*	From CPC Symbol	To CPC Symbol(s)		
	(existing)			
С	B60K 1/04	B60K 1/04, B60L 53/80		
С	B60L 3/00	B60L 3/00, B60L 58/00, B60L 58/10, B60L 58/12,		
		B60L 58/13, B60L 58/14, B60L 58/15, B60L 58/16,		
		B60L 58/18, B60L 58/19, B60L 58/20, B60L 58/21,		
		B60L 58/22, B60L 58/24, B60L 58/25, B60L 58/26,		
		B60L 58/27, B60L 58/30, B60L 58/31, B60L 58/32,		
		B60L 58/33, B60L 58/34, B60L 58/40		
C	B60L 3/0046	B60L 3/0046, B60L 58/00, B60L 58/10, B60L 58/12,		
		B60L 58/13, B60L 58/14, B60L 58/15, B60L 58/16,		
		B60L 58/18, B60L 58/19, B60L 58/20, B60L 58/21,		
		B60L 58/22, B60L 58/24, B60L 58/25, B60L 58/26,		
		B60L 58/27, B60L 58/40		
С	B60L 3/0053	B60L 3/0053, B60L 58/00, B60L 58/30, B60L 58/31,		
		B60L 58/32, B60L 58/33, B60L 58/34, B60L 58/40		
С	B60L 9/00	B60L 9/00, B60L50/53		
D	B60L 11/00	< administrative transfer to B60L 50/00>		
D	B60L 11/002	< administrative transfer to B60L 50/90>		
D	B60L 11/005	< administrative transfer to B60L 50/40>		
D	B60L 11/007	< administrative transfer to B60L 50/20>		
D	B60L 11/02	< administrative transfer to B60L 50/10>		
D	B60L 11/04	< administrative transfer to B60L 50/11>		
 D	B60L 11/06	< administrative transfer to B60L 50/12>		
D	B60L 11/08	< administrative transfer to B60L 50/12>		
D	B60L 11/10	< administrative transfer to B60L 50/14>		
D	B60L 11/12	< administrative transfer to B60L 50/14>		
D	B60L 11/123	< administrative transfer to B60L 50/15>		
D	B60L 11/126	< administrative transfer to BooL 50/01>		
D	B60L 11/120	< administrative transfer to BOOL 50/16>		
D	B60L 11/16	< administrative transfer to B60L 50/30>		
D	B60L 11/18	< administrative transfer to B60L 50/50>		
D	B60L 11/1801	< a d ministrative transfer to B60L 50/50>		
D	B60L 11/1803	< administrative transfer to B60L 50/51 >		
	B60L 11/1805	< administrative transfer to B60L 50/51 >		
	B60L 11/1803	< administrative transfer to B60L 50/52>		
	DOUL 11/1807	< administrative transfer to B60L 52/00>		
	BOUL 11/1009 B60I 11/1911	< administrative transfer to B60L 52/20>		
	DOUL 11/1811	<pre>< administrative transfer to B60L 53/20></pre>		
	DUUL 11/1012	< auministrative transfer to D60L $33/22>$		
	DOUL 11/1814	<pre>< administrative transfer to B60L 53/24></pre>		
	DOUL 11/1810	<pre>< administrative transfer to B60L 53/14></pre>		
D	B60L 11/1818	< administrative transfer to B60L 53/16>		
	BOUL 11/182	< administrative transfer to B60L 53/12>		
	BOUL 11/1822	< administrative transfer to B60L 53/80>		
	B60L 11/1824	< administrative transfer to B60L 53/30>		
D	B60L 11/1825	< administrative transfer to B60L 53/31>		
D	B60L 11/1827	< administrative transfer to B60L 53/35>		
D	B60L 11/1829	< administrative transfer to B60L 53/38>		

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Type*	From CPC Symbol	To CPC Symbol(s)		
	(existing)			
D	B60L 11/1831	< administrative transfer to B60L 53/39>		
D	B60L 11/1833	< administrative transfer to B60L 53/36>		
D	B60L 11/1835	< administrative transfer to B60L 53/37>		
D	B60L 11/1837	< administrative transfer to B60L 53/32>		
D	B60L 11/1838	< administrative transfer to B60L 53/60>		
D	B60L 11/184	< administrative transfer to B60L 53/64>		
D	B60L 11/1842	< administrative transfer to B60L 55/00>		
D	B60L 11/1844	< administrative transfer to B60L 53/63>		
D	B60L 11/1846	< administrative transfer to B60L 53/65>		
D	B60L 11/1848	< administrative transfer to B60L 53/665>		
D	B60L 11/185	< administrative transfer to B60L 53/11>		
D	B60L 11/1851	< administrative transfer to B60L 58/10>		
D	B60L 11/1853	< administrative transfer to B60L 58/18>		
D	B60L 11/1855	< administrative transfer to B60L 58/19>		
D	B60L 11/1857	< administrative transfer to B60L 58/16>		
D	B60L 11/1859	< administrative transfer to B60L 58/14>		
D	B60L 11/1861	< administrative transfer to B60L 58/12>		
D	B60L 11/1862	< administrative transfer to B60L 58/13>		
D	B60L 11/1864	< administrative transfer to B60L 58/21>		
D	B60L 11/1866	< administrative transfer to B60L 58/22>		
D	B60L 11/1868	< administrative transfer to B60L 58/20>		
D	B60L 11/187	< administrative transfer to B60L 58/24>		
D	B60L 11/1872	< administrative transfer to B60L 58/25>		
D	B60L 11/1874	< administrative transfer to B60L 58/26>		
D	B60L 11/1875	< administrative transfer to B60L 58/27>		
D	B60L 11/1877	< administrative transfer to B60L 50/66>		
D	B60L 11/1879	< administrative transfer to B60L 50/64>		
D	B60L 11/1881	< administrative transfer to B601, 58/30>		
D	B60L 11/1883	< administrative transfer to B60L 50/72>		
D	B60L 11/1885	< administrative transfer to B60L 58/31>		
D	B60L 11/1887	< administrative transfer to B60L 58/40>		
D	B60L 11/1888	< administrative transfer to B60L 58/32>		
D	B60L 11/189	< administrative transfer to B60L 58/32>		
D	B60L 11/1892	< administrative transfer to B60L 58/33>		
D	B60L 11/1894	< administrative transfer to B60L 58/34>		
D	B60L 11/1896	< administrative transfer to B60L 50/71>		
D	B60L 11/1898	< administrative transfer to B60L 50/72>		
0	B60L 50/50	B60L 50/50, B60L 50/60, B60L 50/64, B60L 50/70,		
× ×		B60L 50/75		
0	B60L 53/00	B60L 53/00, B60L 53/50, B60L 53/51, B60L 53/52,		
		B60L 53/53, B60L 53/54, B60L 53/55, B60L 53/56,		
		B60L 53/57, B60L 53/67, B60L 53/68		
Q	B60L 53/12	B60L 53/12, B60L 53/122, B60L 53/124, B60L 53/126		
Q	B60L 53/14	B60L 53/14, B60L 53/18		
Q	B60L 53/30	B60L 53/30, B60L 53/302, B60L 53/305, B60L 53/34,		
-		B60L 53/67, B60L 53/68		
Q	B60L 53/60	B60L 53/10, B60L 53/60, B60L 53/62, B60L 53/66,		
-		B60L 53/67, B60L 53/68		

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Type*	From CPC Symbol	To CPC Symbol(s)	
	(existing)		
Q	B60L 58/12	B60L 58/12, B60L 58/15	
Q	B60L 58/13	B60L 58/13, B60L 58/15	
Q	B60L 58/14	B60L 58/14, B60L 58/15	
D	B60L 2230/00	< administrative transfer to B60L 53/30 INV>	
D	B60L 2230/10	< administrative transfer to B60L 53/30 INV>	
D	B60L 2230/12	< administrative transfer to B60L 53/18 INV>	
D	B60L 2230/14	< administrative transfer to B60L 53/34 INV>	
D	B60L 2230/16	< administrative transfer to B60L 53/305 INV>	
D	B60L 2230/20	< administrative transfer to B60L 53/50 INV>	
D	B60L 2230/22	< administrative transfer to B60L 53/51 INV>	
D	B60L 2230/24	< administrative transfer to B60L 53/52 INV>	
D	B60L 2230/26	< administrative transfer to B60L 53/56 INV>	
D	B60L 2230/28	< administrative transfer to B60L 53/54 INV>	
D	B60L 2230/30	< administrative transfer to B60L 53/53 INV>	
D	B60L 2230/32	< administrative transfer to B60L 53/55 INV>	
D	B60L 2230/34	< administrative transfer to B60L 53/57 INV>	
D	B60L 2230/40	< administrative transfer to B60L 53/68 INV>	
С	B60S 5/06	B60S 5/06, B60L 53/80	

* 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:

- <u>Only</u> 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>	IPC	Action*
B60L 11/00		DELETE
B60L 11/002		DELETE
B60L 11/005		DELETE
B60L 11/007		DELETE
B60L 11/02		DELETE
B60L 11/04		DELETE
B60L 11/06		DELETE
B60L 11/08		DELETE
B60L 11/10		DELETE
B60L 11/12		DELETE
B60L 11/123		DELETE
B60L 11/126		DELETE
B60L 11/14		DELETE
B60L 11/16		DELETE
B60L 11/18		DELETE
B60L 11/1801		DELETE
B60L 11/1803		DELETE
B60L 11/1805		DELETE
B60L 11/1807		DELETE
B60L 11/1809		DELETE
B60L 11/1811		DELETE
B60L 11/1812		DELETE
B60L 11/1814		DELETE
B60L 11/1816		DELETE
B60L 11/1818		DELETE
B60L 11/182		DELETE
B60L 11/1822		DELETE
B60L 11/1824		DELETE
B60L 11/1825		DELETE
B60L 11/1827		DELETE
B60L 11/1829		DELETE
B60L 11/1831		DELETE
B60L 11/1833		DELETE
B60L 11/1835		DELETE
B60L 11/1837		DELETE
B60L 11/1838		DELETE
B60L 11/184		DELETE
B60L 11/1842		DELETE
B60L 11/1844		DELETE
B60L 11/1846		DELETE
B60L 11/1848		DELETE
B60L 11/185		DELETE
B60L 11/1851		DELETE

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<u>CPC</u>	<u>IPC</u>	Action*
D60L 11/1952		DELETE
B60L 11/1855		DELETE
B60L 11/1857		DELETE
B60L 11/1859		DELETE
B60L 11/1861		DELETE
B60L 11/1862		DELETE
B60L 11/1864		DELETE
B60L 11/1866		DELETE
B60L 11/1868		DELETE
B60L 11/187		DELETE
B60L 11/1872		DELETE
B60L 11/1874		DELETE
B60L 11/1875		DELETE
B60L 11/1877		DELETE
B60L 11/1879		DELETE
B60L 11/1881		DELETE
B60L 11/1883		DELETE
B60L 11/1885		DELETE
B60L 11/1887		DELETE
B60L 11/1888		DELETE
B60L 11/189		DELETE
B60L 11/1892		DELETE
B60L 11/1894		DELETE
B60L 11/1896		DELETE
B60L 11/1898		DELETE
B60L 50/00	B60L 50/00	NEW
B60L 50/10	B60L 50/10	NEW
B60L 50/11	B60L 50/11	NEW
B60L 50/12	B60L 50/12	NEW
B60L 50/13	B60L 50/13	NEW
B60L 50/14	B60L 50/14	NEW
B60L 50/15	B60L 50/15	NEW
B60L 50/16	B60L 50/16	NEW
B60L 50/20	B60L 50/20	NEW
B60L 50/30	B60L 50/30	NEW
B60L 50/40	B60L 50/40	NEW
B60L 50/50	B60L 50/50	NEW
B60L 50/51	B60L 50/51	NEW
B60L 50/52	B60L 50/52	NEW
B60L 50/53	B60L 50/53	NEW
B60L 50/60	B60L 50/60	NEW
B60L 50/61	B60L 50/61	NEW
B60L 50/62	B60L 50/62	NEW
B60L 50/64	B60L 50/64	NEW
B60L 50/66	B60L 50/60	NEW
B60L 50/70	B60L 50/70	NEW

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CPC	<u>IPC</u>	<u>Action*</u>
B60L 50/71	B60L 50/71	NEW
B60L 50/72	B60L 50/72	NEW
B60L 50/75	B60L 50/75	NEW
B60L 50/90	B60L 50/90	NEW
B60L 53/00	B60L 53/00	NEW
B60L 53/10	B60L 53/10	NEW
B60L 53/11	B60L 53/10	NEW
B60L 53/12	B60L 53/12	NEW
B60L 53/122	B60L 53/122	NEW
B60L 53/124	B60L 53/124	NEW
B60L 53/126	B60L 53/126	NEW
B60L 53/14	B60L 53/14	NEW
B60L 53/16	B60L 53/16	NEW
B60L 53/18	B60L 53/18	NEW
B60L 53/20	B60L 53/20	NEW
B60L 53/22	B60L 53/22	NEW
B60L 53/24	B60L 53/24	NEW
B60L 53/30	B60L 53/30	NEW
B60L 53/302	B60L 53/302	NEW
B60L 53/305	B60L 53/30	NEW
B60L 53/31	B60L 53/31	NEW
B60L 53/32	B60L 53/30	NEW
B60L 53/34	B60L 53/34	NEW
B60L 53/35	B60L 53/35	NEW
B60L 53/36	B60L 53/36	NEW
B60L 53/37	B60L 53/37	NEW
B60L 53/38	B60L 53/38	NEW
B60L 53/39	B60L 53/39	NEW
B60L 53/50	B60L 53/50	NEW
B60L 53/51	B60L 53/51	NEW
B60L 53/52	B60L 53/52	NEW
B60L 53/53	B60L 53/53	NEW
B60L 53/54	B60L 53/54	NEW
B60L 53/55	B60L 53/55	NEW
B60L 53/56	B60L 53/56	NEW
B60L 53/57	B60L 53/57	NEW
B60L 53/60	B60L 53/60	NEW
B60L 53/62	B60L 53/62	NEW
B60L 53/63	B60L 53/63	NEW
BOUL 53/64	BOUL 53/64	NEW
BOUL 53/65	BOUL 53/65	
BOUL 53/66	BOUL 53/66	
BOUL 33/003	BOUL 33/00 DEOL 52/67	
DOUL 33/0/ DCOL 52/69	DOUL 33/0/	
BOUL 33/08	BOUL 33/08	
BOUL 53/80	BOUL 53/80	NEW

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<u>CPC</u>	<u>IPC</u>	Action*
B60L 55/00	R60L 55/00	NEW
B60L 58/00	B60L 58/00	NEW
B60L 58/00	B60L 58/10	NEW
B60L 58/10	B60L 58/10	NEW
B60L 58/12 B60L 58/13	B60L 58/12 B60L 58/13	NEW
B60L 58/15	B60L 58/13	NEW
B60L 58/15	B60L 58/15	NEW
B60L 58/16	B60L 58/16	NEW
B60L 58/18	B60L 58/18	NEW
B60L 58/19	B60L 58/19	NEW
B60L 58/20	B60L 58/20	NEW
B60L 58/21	B60L 58/21	NFW
B60L 58/22	B60L 58/22	NEW
B60L 58/24	B60L 58/24	NEW
B60L 58/25	B60L 58/25	NEW
B60L 58/26	B60L 58/26	NEW
B60L 58/27	B60L 58/27	NEW
B60L 58/30	B60L 58/30	NEW
B60L 58/31	B60L 58/31	NEW
B60L 58/32	B60L 58/32	NEW
B60L 58/33	B60L 58/33	NEW
B60L 58/34	B60L 58/34	NEW
B60L 58/40	B60L 58/40	NEW
B60L 2230/00		DELETE
B60L 2230/10		DELETE
B60L 2230/12		DELETE
B60L 2230/14		DELETE
B60L 2230/16		DELETE
B60L 2230/20		DELETE
B60L 2230/22		DELETE
B60L 2230/24		DELETE
B60L 2230/26		DELETE
B60L 2230/28		DELETE
B60L 2230/30		DELETE
B60L 2230/32		DELETE
B60L 2230/34		DELETE
B60L 2230/40		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".

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• 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.
- E and M symbols are not included in the CICL table above unless a change to the existing IPC is desired.

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5. CROSS-REFERENCE LIST (CRL)

Scheme references impacted by this revision project

Location of reference to be changed	<u>Referenced subclass or</u> group to be changed	Action; New reference symbol; New text
B60W 10/00	B60L 11/00	Replace symbol with:
		B60L 50/00
G07F 15/005	B60L 11/00	Replace symbol with:
		B60L 50/00

Definitions references impacted by this revision project

Location of reference to be changed	Referenced subclass or group to be <u>changed</u>	Section of definition	<u>Action; New reference symbol;</u> <u>New text</u>
A61G 5/00	B60L 11/00	Special rules of classification (step 3)	Replace symbol with: B60L 50/00 - B60L 58/00
B60H 1/00278	B60L 11/1851	Informative references	Replace symbol: B60L 58/00
B60H 1/00385	B60L 11/123	Informative references	Replace symbol with: B60L 50/61
B60H 1/00385	B60L 11/18	Informative references	Replace symbol with: B60L 50/50
B60K 6/00	B60L 11/00	Limiting references	Replace symbol with: B60L 50/00 - B60L 58/00
B60K 15/10	B60L 11/18	Informative references	Replace symbol with: B60L 50/50
B60K 17/12	B60L 11/00	Limiting references	Replace symbol with: B60L 50/00 - B60L58/00
B60L 1/006	B60L 11/1818	Limiting references	Replace symbol with: B60L 53/16
B60L 1/006	B60L 11/1842	Limiting references	Replace symbol with: B60L 55/00
B60L 5/42	B60L 11/1809	Limiting references	Replace symbol with: B60L 53/00
B60L 15/007	B60L 11/1812	Informative references	Replace symbol with: B60L 53/22
B60M 7/003	B60L 11/1824	Limiting references	Replace symbol with: B60L 53/00
B60R 16/00	B60L 11/00	Informative references	Replace symbol with: B60L 50/00 - B60L58/00
B60W	B60L 11/00	Informative references	Replace symbol with: B60L 50/00 - B60L58/00

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<u>Location of</u> <u>reference</u> to be changed	Referenced subclass or group to be	Section of definition	<u>Action; New reference symbol;</u> <u>New text</u>
	changed		
G01R	B60L 3/00	Application-oriented references	Replace symbol with: B60L 3/00, B60L 58/00
G01R 11/00	B60L 3/00	Limiting references	Replace symbol with: B60L 3/00, B60L 58/00
G01R 21/133	B60L 3/00	Limiting references	Replace symbol with: B60L 3/00, B60L 58/00
G01R 22/00	B60L 3/00	Limiting references	Replace symbol with: B60L 3/00, B60L 58/00
G07F 15/003	B60L 11/1809	Informative references	Replace symbol with: B60L 53/00
H01F 38/00	B60L 11/182	Informative references	Replace symbol with: B60L 53/12
H01M	B60L 11/18	Informative references	Replace symbol with: B60L 50/50
H01M 8/00	B60L 11/18	Informative references	Replace symbol with: B60L 50/50
H01M 10/00	B60L 11/18	Informative references	Replace symbol with: B60L 50/50
H02H 7/00	B60L 11/18	Informative references	Replace symbol with: B60L 50/50
H02J 7/0027	B60L 11/1809	Limiting references	Replace symbol with: B60L 53/00
H02K 51/00	B60L 11/02 - B60L 11/08	Informative references	Replace symbols with: B60L 50/10 - B60L 50/13

NOTES:

- The CRL tables above are used for changes to locations <u>outside</u> of the project scope. Changes to references in scheme titles or definitions <u>inside</u> 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," <u>referenced</u> D symbols should indicate an action of "delete" or should indicate a replacement symbol and <u>referenced</u> 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.