EUROPEAN PATENT OFFICE U.S. PATENT AND TRADEMARK OFFICE

CPC NOTICE OF CHANGES 514

DATE: MAY 1, 2018

PROJECT RP0131

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

Action	<u>Subclass</u>	Group(s)
SCHEME:		
Symbols Deleted:	Y02B	10/60
	Y02B	20/325
	Y02B	30/123, 30/126
	Y02T	10/38, 10/647, 10/648, 10/649, 10/7266, 10/867
	Y02T	50/145, 50/168, 50/433, 50/436, 50/47, 50/48, 50/545, 50/57,
		50/58, 50/69, 50/70, 50/72, 50/74
	Y02T	90/164, 90/165, 90/166
Symbols New:	Y02B	30/125
	Y02B	30/13
	Y02B	30/17
	Y02E	40/725
	Y02T	50/55
	Y02T	50/6765
	Y02T	90/50
	Y04S	10/542
	Y04S	10/547
	Y04S	40/18
	Y04S	50/16
Title Changed:	Y02B	Subclass
	Y02B	20/32, 20/34
	Y02B	30/08, 30/10, 30/20, 30/50, 30/54, 30/56, 30/60,
		30/625, 30/74, 30/743, 30/76, 30/90
	Y02B	40/10, 40/12, 40/14, 40/16, 40/30, 40/40, 40/70, 40/80
	Y02B	70/10, 70/14, 70/1416, 70/1458, 70/30, 70/32, 70/3208, 70/3258,
		70/34
	Y02B	90/20, 90/22, 90/24, 90/26, 90/2607, 90/2638, 90/2669, 90/2676,
		90/2684, 90/2692
	Y02E	Subclass
	Y02E	10/30, 10/54
	Y02E	20/10, 20/30, 20/32, 20/34
	Y02E	40/20, 40/30, 40/70

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<u>Action</u>	<u>Subclass</u>	Group(s)	
	Y02E	50/32, 50/34	
	Y02E	60/10, 60/12, 60/128, 60/14, 60/30, 60/70, 60/72, 60/721, 60/728,	
		60/78, 60/7807, 60/7838, 60/7869, 60/7876, 60/7884, 60/7892	
	Y02T	10/121, 10/126, 10/146, 10/60, 10/6213, 10/646, 10/7291,	
		10/80, 10/82, 10/86, 10/862	
	Y02T	50/14, 50/162, 50/164, 50/43, 50/54, 50/56, 50/673, 50/826	
	Y02T	90/10, 90/163, 90/167, 90/30, 90/40	
	Y04S	10/10, 10/12, 10/126, 10/265, 10/50, 10/52, 10/54, 10/56, 10/58	
	Y04S	20/00, 20/10, 20/12, 20/20, 20/22, 20/24, 20/248	
	Y04S	30/10	
	Y04S	40/00, 40/10, 40/12, 40/124, 40/128, 40/14, 40/143, 40/146, 40/16,	
		40/20	
	Y04S	50/00	

No other subclasses/groups are impacted by this Notice of Changes.

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

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

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1. CLASSIFICATION SCHEME CHANGES

A. New, Modified or Deleted Group(s)

SUBCLASS Y02B - INDEXING SCHEME RELATING TO CLIMATE CHANGE MITIGATION TECHNOLOGIES RELATED TO BUILDINGS, e.g. INCLUDING HOUSING AND APPLIANCES OR RELATED END-USER APPLICATIONS

Type*	<u>Symbol</u>	Indent Level Number of dots (e.g. 0, 1, 2)	Title (new or modified) "CPC only" text should normally be enclosed in {curly brackets}**	Transferred to#
M	Y02B	subgroup	CLIMATE CHANGE MITIGATION TECHNOLOGIES RELATED TO BUILDINGS, e.g. HOUSING, HOUSE APPLIANCES OR RELATED END-USER APPLICATIONS	
E	Y02B 10/00	0	Integration of renewable energy sources in buildings	
D	Y02B 10/60	1	Use of biomass for heating	<administrative transfer to Y02B 10/00></administrative
Е	Y02B 20/32	2	Electroluminescent panels	
D	Y02B 20/325	3	Specially adapted circuits	<administrative transfer to Y02B 20/32></administrative
М	Y02B 20/34	2	Inorganic LEDs	
С	Y02B 30/08	1	relating to domestic heating, space heating, domestic hot water heating [DHW] or supply systems	Y02B 30/08, Y02B 30/13. Y02B 30/17
М	Y02B 30/10	2	using boilers	
E	Y02B 30/12	2	Hot water central heating systems using heat pumps	
D	Y02B 30/123	3	Self contained heating units using heat pumps	<administrative transfer to Y02B 30/12></administrative
N	Y02B 30/125	3	combined with the use of heat accumulated in storage masses	
D	Y02B 30/126	4	combined with the use of heat accumulated in storage masses	<administrative transfer to Y02B 30/125></administrative
N	Y02B 30/13	2	Hot air central heating systems using heat pumps	
U	Y02B 30/16	2	Central heating systems using steam or condensate extracted or exhausted from steam engine plants	
N	Y02B 30/17	2	District heating	
М	Y02B 30/20	2	Heat consumers, i.e. devices to provide the enduser with heat	

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Type*	Symbol	Indent	Title	Transferred to#
		Level	(new or modified)	
		Number of	"CPC only" text should normally be enclosed in	
		dots (e.g.	{curly brackets}**	
		0, 1, 2)		
U	Y02B 30/22	3	Low temperature radiators, i.e. convectors,	
			radiators or a mixture of both with increased heat-	
			exchange surface being suitable for systems	
			working with a low temperature heat transfer	
			medium	
U	Y02B 30/28	3	Direct fired air heaters, i.e. the air being in direct	
			contact with the exhaust gases of the burner	
M	Y02B 30/50	1	Systems profiting of external or internal conditions	
M	Y02B 30/54	2	Free-cooling systems	
М	Y02B 30/56	2	Heat recovery units	
М	Y02B 30/60	1	Other technologies for heating or cooling	
М	Y02B 30/625	3	combined with heat or power generation [CHP],	
			e.g. trigeneration	
М	Y02B 30/74	2	Technologies based on motor control	
M	Y02B 30/743	3	Speed control of condenser or evaporator fans, e.g.	
			for controlling the pressure of the condenser	
M	Y02B 30/76	2	Centralised control	
М	Y02B 30/90	1	Passive houses; Double facade technology	
М	Y02B 40/10	1	relating to domestic cooking	
М	Y02B 40/12	2	Induction cooking in kitchen stoves	
М	Y02B 40/14	2	Microwave ovens	
M	Y02B 40/16	2	Improved cooking stoves	
М	Y02B 40/30	1	relating to refrigerators or freezers	
М	Y02B 40/40	1	relating to dish washers	
М	Y02B 40/70	1	relating to laundry dryers	
М	Y02B 40/80	1	relating to vacuum cleaners	
М	Y02B 70/10	1	Technologies improving the efficiency by using	
			switched-mode power supplies	
			[SMPS], i.e. efficient power electronics conversion	
М	Y02B 70/14	2	Reduction of losses in power supplies	
М	Y02B 70/1416	3	Converters benefiting from a resonance, e.g.	
			resonant or quasi-resonant converters	
M	Y02B 70/1458	3	Synchronous rectification	

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Type*	Symbol	Indent	<u>Title</u>	Transferred to#
		Level	(new or modified)	
		Number of	"CPC only" text should normally be enclosed in	
		dots (e.g.	{curly brackets}**	
		<u>0, 1, 2)</u>		
М	Y02B 70/30	1	Systems integrating technologies related to power	
			network operation and communication or	
			information technologies for improving the carbon	
			footprint of the management of residential or	
			tertiary loads, i.e. smart grids as climate change	
			mitigation technology in the buildings sector,	
			including also the last stages of power distribution	
			and the control, monitoring or operating	
			management systems at local level (smart grids	
			supporting the management or operation of end-	
			user stationary applications in general, e.g. with no	
			associated climate change mitigation effect	
			Y04S20/00)	
M	Y02B 70/32	2	End-user application control systems	
M	Y02B 70/3208	3	characterised by the aim of the control	
M	Y02B 70/3258	3	characterised by the end-user application	
M	Y02B 70/34	2	Smart metering supporting the carbon neutral	
			operation of end-user applications in buildings	
M	Y02B 90/20	1	Systems integrating technologies related to power	
			network operation and communication or	
			information technologies mediating in the	
			improvement of the carbon footprint of the	
			management of residential or tertiary loads, i.e.	
			smart grids as enabling technology in buildings	
			sector (smart grids supporting the management or	
			operation of end-user stationary applications in	
			general, or like technologies with no associated	
N 4	Y02B 90/22	2	climate change mitigation effect Y04S20/00)	
М	1028 90/22	2	Systems characterised by the monitored, controlled or operated end-user elements or	
			equipments	
М	Y02B 90/24	2	Smart metering mediating in the carbon neutral	
171	1020 30/24		operation of end-user applications in buildings	
M	Y02B 90/26	2	Communication technology specific aspects	
M	Y02B 90/2607	3	characterised by data transport means between	
	.025 55,2007		the monitoring, controlling or managing units and	
			the monitored, controlled or operated electrical	
			equipment	
M	Y02B 90/2638	4	using a wired telecommunication network or a	
			data transmission bus	
М	Y02B 90/2669	4	involving the use of Internet protocol	
М	Y02B 90/2676	3	Communication technology specific aspects	
М	Y02B 90/2684	4	using dedicated transmission supports	
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Type*	<u>Symbol</u>	<u>Indent</u>	<u>Title</u>	Transferred to#
		<u>Level</u>	(new or modified)	
		Number of	"CPC only" text should normally be enclosed in	
		dots (e.g.	{curly brackets}**	
		<u>0, 1, 2)</u>		
М	Y02B 90/2692	4	using the power network as support for the	
			transmission	

SUBCLASS Y02E - REDUCTION OF GREENHOUSE GASES [GHG] EMISSION, RELATED TO ENERGY GENERATION, TRANSMISSION OR DISTRIBUTION

Type *	<u>Symbol</u>	Indent Level Number of dots (e.g. 0, 1, 2)	Title (new or modified) "CPC only" text should normally be enclosed in {curly brackets}**	<u>Transferred to</u> #
М	Y02E		REDUCTION OF GREENHOUSE GAS [GHG] EMISSIONS, RELATED TO ENERGY GENERATION, TRANSMISSION OR DISTRIBUTION	
М	Y02E 10/30	1	Energy from the sea (tidal stream Y02E 10/28)	
M	Y02E 10/54	2	Material technologies	
M	Y02E 20/10	1	Combined combustion	
М	Y02E 20/30	1	Technologies for a more efficient combustion or heat usage	
M	Y02E 20/32	2	Direct CO ₂ mitigation	
М	Y02E 20/34	2	Indirect CO_2 mitigation, i.e. by acting on non CO_2 directly related matters of the process, e.g. more efficient use of fuels	
M	Y02E 40/20	1	Active power filtering [APF]	
М	Y02E 40/30	1	Reactive power compensation (Y02E 40/10 take precedence)	
M	Y02E 40/70	1	Systems integrating technologies related to power network operation and communication or information technologies for improving the carbon footprint of electrical power generation, transmission or distribution, i.e. smart grids as climate change mitigation technology in the energy generation sector (smart grids relating to the energy generation sector in general, e.g. with no associated climate change mitigation effect Y04S 10/00)	
C	Y02E 40/72	2	Systems characterised by the monitoring, control or operation of energy generation units, e.g. distributed generation [DER] or load-side generation	Y02E 40/72, Y02E 40/725

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Type *	<u>Symbol</u>	Indent Level Number of dots (e.g. 0, 1, 2)	Title (new or modified) "CPC only" text should normally be enclosed in {curly brackets}**	Transferred to [#]
N	Y02E 40/725	3	the energy generation units being or involving renewable energy sources	
М	Y02E 50/32	2	Synthesis of alcohols or diesel from waste including a pyrolysis or gasification step	
M	Y02E 50/34	2	Methane	
M	Y02E 60/10	1	Energy storage	
Е	Y02E 60/12	2	Battery technologies with an indirect contribution to GHG emissions mitigation (battery technologies specific to electromobility Y02T10/7005)	
С	Y02E 60/128	3	Hybrid cells composed of a half-cell of a fuel-cell type and a half-cell of the secondary-cell type	Y02E 60/12, Y02E 60/128
M	Y02E 60/14	2	Thermal storage	
M	Y02E 60/30	1	Hydrogen technology	
M	Y02E 60/70	1	Systems integrating technologies related to power network operation and communication or information technologies mediating in the improvement of the carbon footprint of electrical power generation, transmission or distribution, i.e. smart grids as enabling technology in the energy generation sector (smart grids relating to the energy generation sector in general, e.g. with no associated climate change mitigation effect Y04S 10/00)	
M	Y02E 60/72	2	Systems characterised by the monitored, controlled or operated power network elements or equipments	
M	Y02E 60/721	3	the elements or equipments being or involving electric vehicles [EV] or hybrid vehicles [HEV], i.e. power aggregation of EV or HEV, vehicle to grid arrangements [V2G] (remote or cooperative charging Y02T90/168; details associated with the interoperability in the section of transportation, e.g. vehicle recognition, authentication, identification or billing Y02T90/169)	
М	Y02E 60/728	4	the measuring units being or involving phasor measuring units [PMU]	

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Type	<u>Symbol</u>	<u>Indent</u>	<u>Title</u>	Transferred to#
*		<u>Level</u>	(new or modified)	
		Number of	"CPC only" text should normally be	
		dots (e.g.	enclosed in {curly brackets}**	
		<u>0, 1, 2)</u>		
M	Y02E 60/78	2	Communication technology specific	
			aspects	
M	Y02E 60/7807	3	characterised by data transport means	
			between the monitoring, controlling or	
			managing units and monitored,	
			controlled or operated electrical	
			equipment	
M	Y02E 60/7838	4	using a wired telecommunication	
			network or a data transmission bus	
M	Y02E 60/7869	4	involving the use of Internet protocol	
M	Y02E 60/7876	3	Communication technology specific	
			aspects	
М	Y02E 60/7884	4	using dedicated transmission supports	
М	Y02E 60/7892	4	using the power network as support for	
			the transmission	

SUBCLASS Y02T - CLIMATE CHANGE MITIGATION TECHNOLOGIES RELATED TO TRANSPORTATION

Type	<u>Symbol</u>	<u>Indent</u>	<u>Title</u>	Transferred to#
*		<u>Level</u>	(new or modified)	
		Number of	"CPC only" text should normally be	
		dots (e.g.	enclosed in {curly brackets}**	
		<u>0, 1, 2)</u>		
U	Y02T 10/12	2	Technologies for the improvement of	
			indicated efficiency of a conventional ICE	
M	Y02T 10/121	3	Adding non fuel substances or small	
			quantities of secondary fuel to fuel, air or	
			fuel/air mixture	
M	Y02T 10/126	3	Acting upon fuel or oxidizing compound,	
			e.g. pre-treatment by catalysts, ultrasound	
			or electricity	
M	Y02T 10/146	3	Charge mixing enhancing outside the	
			combustion chamber	
Е	Y02T 10/30	2	Use of alternative fuels	
D	Y02T 10/38	3	Non-fossil fuels	<administrative td="" to<="" transfer=""></administrative>
				Y02T 10/30>
U	Y02T 10/50	2	Intelligent control systems, e.g. conjoint	
			control	
M	Y02T 10/60	1	Other road transportation technologies	
			with climate change mitigation effect	
U	Y02T 10/62	2	Hybrid vehicles	

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Type	Symbol	Indent	<u>Title</u>	Transferred to#
*	<u>Syllibol</u>	Level	(new or modified)	<u>ITAIISIEITEU tO</u>
		Number of	"CPC only" text should normally be	
		dots (e.g.	enclosed in {curly brackets}**	
		0, 1, 2)	enclosed in jearly brackets;	
М	Y02T 10/6213	3	using ICE and electric energy storage, i.e.	
	,		battery, capacitor (battery for energy	
			storage for electromobility in general	
			Y02T10/7005; capacitor technology for	
			energy storage for electromobility in	
			general Y02T10/7022)	
U	Y02T 10/6273	3	Combining different types of energy	
			storage	
U	Y02T 10/64	2	Electric machine technologies for	
			applications in electromobilty	
U	Y02T 10/642	3	Control strategies of electric machines for	
			automotive applications	
Е	Y02T 10/646	4	With two or more electric drive machines	
D	Y02T 10/647	5	One electric drive machine	<administrative td="" to<="" transfer=""></administrative>
D	Y02T 10/648	5	Two electric drive machines	Y02T 10/646> <administrative td="" to<="" transfer=""></administrative>
	1021 10/048]	Two electric drive machines	Y02T 10/646>
D	Y02T 10/649	5	More than two electric drive machines	<administrative td="" to<="" transfer=""></administrative>
	,			Y02T 10/646>
Е	Y02T 10/7258	3	Optimisation of vehicle performance	·
D	Y02T 10/7266	4	Automated control	<administrative td="" to<="" transfer=""></administrative>
				Y02T 10/7258>
М	Y02T 10/7291	4	by route optimisation processing	
M	Y02T 10/80	1	Technologies aiming to reduce greenhouse	
			gasses emissions common to all road	
			transportation technologies	
М	Y02T 10/82	2	Elements for improving aerodynamics	
E	Y02T 10/86	2	Optimisation of rolling resistance, e.g.	
			weight reduction	
М	Y02T 10/862	3	Tyres, e.g. materials	
D	Y02T 10/867	3	Others, e.g. wheel construction	<administrative td="" to<="" transfer=""></administrative>
—	V02T 40/00			Y02T 10/86>
U	Y02T 10/88	2	Optimized components or subsystems, e.g.	
- 11	V02T 10/00	2	lighting, actively controlled glasses	
U	Y02T 10/90	2	Energy harvesting concepts as power supply for auxiliaries' energy consumption,	
E	Y02T 50/00	0	e.g. photovoltaic sun-roof Aeronautics or air transport	
U	Y02T 50/10	1	Drag reduction	
E	Y02T 50/14	2	Adaptive structures, e.g. morphing wings	
D	Y02T 50/145	3	Morphing wings or smart wings	<administrative td="" to<="" transfer=""></administrative>
	1021 30/143		working wings or smart wings	Y02T 50/14>
E	Y02T 50/162	3	by generating or controlling vortexes	.52. 50, 2.
M	Y02T 50/164	4	at the wing tip, e.g. winglets	
	,	<u> </u>	1 0 0 0	I

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D	Y02T 50/168	4	actively	<administrative 162="" 50="" to="" transfer="" y02t=""></administrative>
U	Y02T 50/30	1	Wing lift efficiency	
U	Y02T 50/40	1	Weight reduction	
E	Y02T 50/43	3	Composites	
D	Y02T 50/433	4	Composites	<administrative 43="" 50="" to="" transfer="" y02t=""></administrative>
D	Y02T 50/436	4	Metallic lightweight	<administrative 43="" 50="" to="" transfer="" y02t=""></administrative>
E	Y02T 50/46	2	Interior	
D	Y02T 50/47	3	Materials	<administrative 46="" 50="" to="" transfer="" y02t=""></administrative>
D	Y02T 50/48	3	Design measures	<administrative 46="" 50="" to="" transfer="" y02t=""></administrative>
U	Y02T 50/50	1	On board measures aiming to increase energy efficiency	
U	Y02T 50/52	2	concerning the electrical systems	
E	Y02T 50/54	3	All-electric or substantially electric architectures	
D	Y02T 50/545	4	All electric architecture	<administrative 50="" 54="" to="" transfer="" y02t=""></administrative>
N	Y02T 50/55	3	Solar cells as on-board power source	
E	Y02T 50/56	2	Thermal management, e.g. environmental	
			control systems [ECS] or cooling	
D	Y02T 50/57	3	Reduction of energy losses	<administrative 50="" 56="" to="" transfer="" y02t=""></administrative>
D	Y02T 50/58	3	Optimization of hot and cold sources on board an aircraft	<administrative 50="" 56="" to="" transfer="" y02t=""></administrative>
U	Y02T 50/60	1	Efficient propulsion technologies	
С	Y02T 50/67	2	Relevant aircraft propulsion technologies	Y02T 50/67, Y02T 50/6765
M	Y02T 50/673	3	Improving the blades aerodynamics	
U	Y02T 50/675	3	Enabling an increased combustion temperature by cooling	
U	Y02T 50/676	4	Blades cooling	
N	Y02T 50/6765	3	Enabling an increased combustion temperature by thermal barrier coatings	
U	Y02T 50/678	3	using fuels of non-fossil origin	
D	Y02T 50/69	2	Solar cells as on board power source	<administrative 50="" 55="" to="" transfer="" y02t=""></administrative>
D	Y02T 50/70	1	Enabling use of sustainable fuels	<administrative 00="" 50="" to="" transfer="" y02t=""></administrative>

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		Number of dots (e.g. 0, 1, 2)	"CPC only" text should normally be enclosed in {curly brackets}**	
D	Y02T 50/72	2	Synthetic fuels	<administrative 00="" 50="" to="" transfer="" y02t=""></administrative>
D	Y02T 50/74	2	Bio fuels	<administrative 00="" 50="" to="" transfer="" y02t=""></administrative>
М	Y02T 50/826	3	Towing equipment	
С	Y02T 90/00	0	Enabling technologies or technologies with a potential or indirect contribution to GHG emissions mitigation	Y02T 90/00, Y02T 90/50
М	Y02T 90/10	1	Technologies related to electric vehicle charging	
E	Y02T 90/163	3	Information or communication technologies related to charging of electric vehicle	
D	Y02T 90/164	4	Charging station suitability	<administrative 163="" 90="" to="" transfer="" y02t=""></administrative>
D	Y02T 90/165	4	Charging station location	<administrative 163="" 90="" to="" transfer="" y02t=""></administrative>
D	Y02T 90/166	4	Charging station availability	<administrative 163="" 90="" to="" transfer="" y02t=""></administrative>
M	Y02T 90/167	3	Systems integrating technologies related to power network operation and communication or information technologies for supporting the interoperability of electric or hybrid vehicles, i.e. smartgrids as interface for battery charging of electric vehicles [EV] or hybrid vehicles [HEV] (power aggregation of EV or HEV Y02E60/721)	
М	Y02T 90/30	1	Application of fuel cell technology to transportation	
М	Y02T 90/40	1	Application of hydrogen technology to transportation	
U	Y02T 90/46	2	Hydrogen as fuel in waterborne transportation	
N	Y02T 90/50	1	Computer aided design [CAD] for improving the mechanical performance in the sector of transportation, e.g. improvement of aerodynamics, noise or vibration reduction, tyre design	

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SUBCLASS Y04S - SYSTEMS INTEGRATING TECHNOLOGIES RELATED TO POWER NETWORK OPERATION, COMMUNICATION OR INFORMATION TECHNOLOGIES FOR IMPROVING THE ELECTRICAL POWER GENERATION, TRANSMISSION, DISTRIBUTION, MANAGEMENT OR USAGE, i.e. SMART GRID

Type*	<u>Symbol</u>	Indent Level Number of dots (e.g. 0, 1, 2)	Title (new or modified) "CPC only" text should normally be enclosed in {curly brackets}**	<u>Transferred to</u> #
U	Y04S 10/00	0	Systems supporting electrical power generation, transmission or distribution	
М	Y04S 10/10	1	Systems characterised by the monitored, controlled or operated power network elements or equipment	
М	Y04S 10/12	2	the elements or equipment being or involving energy generation units, including distributed generation [DER] or load-side generation	
M	Y04S 10/126	3	the energy generation units being or involving electric vehicles [EV] or hybrid vehicles [HEV], i.e. power aggregation of EV or HEV, vehicle to grid arrangements [V2G] (remote or cooperative charging Y04S30/12; details associated with the interoperability in the section of transportation, e.g. vehicle recognition, authentication, identification or billing Y04S30/14)	
M	Y04S 10/265	3	the measuring units being or involving phasor measuring units [PMU]	
M	Y04S 10/50	1	Systems or methods supporting the power network operation or management, involving a certain degree of interaction with the load-side end user applications	
М	Y04S 10/52	2	Outage or fault management	
С	Y04S 10/54	2	Management of operational aspects	Y04S 10/54, Y04S 10/542, Y04S 10/547
N	Y04S 10/542	3	Planning, load or production forecast	

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Type*	<u>Symbol</u>	Indent Level Number of dots (e.g. 0, 1, 2)	Title (new or modified) "CPC only" text should normally be enclosed in {curly brackets}**	<u>Transferred to</u> #
U	Y04S 10/545	3	Computing methods or systems for efficient or low carbon management or operation of electric power systems	
N	Y04S 10/547	3	Maintenance, construction or extension	
М	Y04S 10/56	2	Supply chain or logistics, e.g. warehousing, distribution, inventory, stock management, order filling, procurement or balancing against orders	
М	Y04S 10/58	2	Financial or economic aspects related to the network operation	
M	Y04S 20/00	0	Systems supporting the management or operation of enduser stationary applications, including also the last stages of power distribution and the control, monitoring or operating management systems at local level (the energy generation units being or involving electricity based vehicles Y04S 10/126; remote or cooperative charging of electric or hybrid vehicles Y04S 30/12)	
М	Y04S 20/10	1	System characterised by the monitored, controlled or operated end-user elements or equipments	
М	Y04S 20/12	2	the elements or equipments being or involving energy storage units, uninterruptible power supply [UPS] systems or standby or emergency generators involved in the last power distribution stages	
М	Y04S 20/20	1	End-user application control systems	
М	Y04S 20/22	2	characterised by the aim of the control	

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Type*	<u>Symbol</u>	Indent Level Number of dots (e.g. 0, 1, 2)	Title (new or modified) "CPC only" text should normally be enclosed in {curly brackets}**	<u>Transferred to</u> #
М	Y04S 20/24	2	characterised by the end-user application	
M	Y04S 20/248	3	the end-user application involving UPS systems or standby or emergency generators	
U	Y04S 30/00	0	Systems supporting specific end- user applications in the sector of transportation	
M	Y04S 30/10	1	Systems supporting the interoperability of electric or hybrid vehicles	
M	Y04S 40/00	0	Systems for electrical power generation, transmission, distribution or end-user application management characterised by the use of communication or information technologies, or communication or information technology specific aspects supporting them	
С	Y04S 40/10	1	characterised by communication technology	Y04S 40/10, Y04S 40/18
M	Y04S 40/12	2	characterised by data transport means between the monitoring, controlling or managing units and monitored, controlled or operated electrical equipment	
M	Y04S 40/124	3	using wired telecommunication networks or data transmission busses	
M	Y04S 40/128	3	involving the use of Internet protocol	
М	Y04S 40/14	2	Communication technology specific aspects	

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Type*	<u>Symbol</u>	Indent Level Number of dots (e.g. 0, 1, 2)	<u>Title</u> (new or modified) "CPC only" text should normally be enclosed in {curly brackets}**	<u>Transferred to[#]</u>
M	Y04S 40/143	3	using dedicated transmission supports	
М	Y04S 40/146	3	using power networks as support for transmission	
М	Y04S 40/16	2	Details of management of the overlaying communication network between the monitoring, controlling or managing units and monitored, controlled or operated electrical equipment	
U	Y04S 40/168	3	for performance monitoring	
N	Y04S 40/18	2	Network protocols supporting networked applications, e.g. including control of end-device applications over a network	
М	Y04S 40/20	1	Information technology specific aspects	
С	Y04S 50/00	0	Market activities related to the operation of systems integrating technologies related to power network operation or related to communication or information technologies	Y04S 50/00, Y04S 50/16
U	Y04S 50/14	1	Marketing, i.e. market research and analysis, surveying, promotions, advertising, buyer profiling, customer management or rewards	
N	Y04S 50/16	1	Energy services, e.g. dispersed generation or demand or load or energy savings aggregation	

^{*}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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- For U groups, the minimum requirement is to include the U group located immediately prior to the N group or N group array, in order to show the N group hierarchy and improve the readability and understanding of the scheme. Always include the symbol, indent level and title of the U group in the table above.
- All entry types should be included in the scheme changes table above for better understanding of the overall scheme change picture. Symbol, indent level, and title are required for all types except "D" which requires only a symbol.
- #"Transferred to" column <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>" or "<administrative transfer to XX and YY simultaneously>" when administrative transfer of the same documents is to more than one place.
- Administrative transfer to main trunk groups is assumed to be "invention information", unless otherwise indicated, and to 2000 series groups is assumed to be "additional information".

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3. REVISION CONCORDANCE LIST (RCL)

Type*	From CPC Symbol (existing)	To CPC Symbol(s)
D	Y02B 10/60	<administrative 00="" 10="" to="" transfer="" y02b=""></administrative>
D	Y02B 20/325	<administrative 20="" 32="" to="" transfer="" y02b=""></administrative>
С	Y02B 30/08	Y02B 30/08, Y02B 30/13.Y02B 30/17
D	Y02B 30/123	<administrative 12="" 30="" to="" transfer="" y02b=""></administrative>
D	Y02B 30/126	<administrative 125="" 30="" to="" transfer="" y02b=""></administrative>
С	Y02E 40/72	Y02E 40/72, Y02E 40/725
С	Y02E 60/128	Y02E 60/12, Y02E 60/128
D	Y02T 10/38	<administrative 10="" 30="" to="" transfer="" y02t=""></administrative>
D	Y02T 10/647	<administrative 10="" 646="" to="" transfer="" y02t=""></administrative>
D	Y02T 10/648	<administrative 10="" 646="" to="" transfer="" y02t=""></administrative>
D	Y02T 10/649	<administrative 10="" 646="" to="" transfer="" y02t=""></administrative>
D	Y02T 10/7266	<administrative 10="" 7258="" to="" transfer="" y02t=""></administrative>
D	Y02T 10/867	<administrative 10="" 86="" to="" transfer="" y02t=""></administrative>
D	Y02T 50/145	<administrative 14="" 50="" to="" transfer="" y02t=""></administrative>
D	Y02T 50/168	<administrative 162="" 50="" to="" transfer="" y02t=""></administrative>
D	Y02T 50/433	<administrative 43="" 50="" to="" transfer="" y02t=""></administrative>
D	Y02T 50/436	<administrative 43="" 50="" to="" transfer="" y02t=""></administrative>
D	Y02T 50/47	<administrative 46="" 50="" to="" transfer="" y02t=""></administrative>
D	Y02T 50/48	<administrative 46="" 50="" to="" transfer="" y02t=""></administrative>
D	Y02T 50/545	<administrative 50="" 54="" to="" transfer="" y02t=""></administrative>
D	Y02T 50/57	<administrative 50="" 56="" to="" transfer="" y02t=""></administrative>
D	Y02T 50/58	<administrative 50="" 56="" to="" transfer="" y02t=""></administrative>
С	Y02T 50/67	Y02T 50/67,Y02T 50/6765
D	Y02T 50/69	<administrative 50="" 55="" to="" transfer="" y02t=""></administrative>
D	Y02T 50/70	<administrative 00="" 50="" to="" transfer="" y02t=""></administrative>
D	Y02T 50/72	<administrative 00="" 50="" to="" transfer="" y02t=""></administrative>
D	Y02T 50/74	<administrative 00="" 50="" to="" transfer="" y02t=""></administrative>
С	Y02T 90/00	Y02T 90/00,Y02T 90/50
D	Y02T 90/164	<administrative 163="" 90="" to="" transfer="" y02t=""></administrative>
D	Y02T 90/165	<administrative 163="" 90="" to="" transfer="" y02t=""></administrative>
D	Y02T 90/166	<administrative 163="" 90="" to="" transfer="" y02t=""></administrative>
С	Y04S 10/54	Y04S 10/54,Y04S 10/542,Y04S 10/547
С	Y04S 40/10	Y04S 40/10,Y04S 40/18
С	Y04S 50/00	Y04S 50/00,Y04S 50/16

^{*} C = entries with modified file scope where reclassification of documents from the entries is involved; Q = new entries which are firstly populated with documents via administrative transfers from deleted (D) entries. Afterwards, the transferred documents into the Q entry will either stay or be moved to more appropriate entries, as determined by intellectual reclassification; D = deleted entries.

NOTES:

- Only C, D, and Q type entries are included in the table above.
- When multiple symbols are included in the "To" column, avoid using ranges of symbols in order to be as precise as possible.

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- For administrative transfer of documents, the following text should be used: "< administrative transfer to XX>" or "<administrative transfer to XX and ADMINISTRATIVE TRANSFER TO YADMINISTRATIVE TRANSFER TO Y simultaneously>" when administrative transfer of the same documents is to more than one place.
- Administrative transfer to main trunk groups is assumed to be "invention information", unless otherwise indicated, and to 2000 series groups is assumed to be "additional information".

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4. CHANGES TO THE CPC-TO-IPC CONCORDANCE LIST (CICL)

<u>CPC</u>	<u>IPC</u>	Action*
Y02B10/60	CPCONLY	DELETE
Y02B20/325	CPCONLY	DELETE
Y02B30/123	CPCONLY	DELETE
Y02B30/125	CPCONLY	NEW
Y02B30/126	CPCONLY	DELETE
Y02B30/13	CPCONLY	NEW
Y02B30/17	CPCONLY	NEW
Y02E40/725	CPCONLY	NEW
Y02T10/38	CPCONLY	DELETE
Y02T10/647	CPCONLY	DELETE
Y02T10/648	CPCONLY	DELETE
Y02T10/649	CPCONLY	DELETE
Y02T10/7266	CPCONLY	DELETE
Y02T10/867	CPCONLY	DELETE
Y02T50/145	CPCONLY	DELETE
Y02T50/168	CPCONLY	DELETE
Y02T50/433	CPCONLY	DELETE
Y02T50/436	CPCONLY	DELETE
Y02T50/47	CPCONLY	DELETE
Y02T50/48	CPCONLY	DELETE
Y02T50/545	CPCONLY	DELETE
Y02T50/55	CPCONLY	NEW
Y02T50/57	CPCONLY	DELETE
Y02T50/58	CPCONLY	DELETE
Y02T50/6765	CPCONLY	NEW
Y02T50/69	CPCONLY	DELETE
Y02T50/70	CPCONLY	DELETE
Y02T50/72	CPCONLY	DELETE
Y02T50/74	CPCONLY	DELETE
Y02T90/164	CPCONLY	DELETE
Y02T90/165	CPCONLY	DELETE
Y02T90/166	CPCONLY	DELETE
Y02T90/50	CPCONLY	NEW
Y04S10/542	CPCONLY	NEW
Y04S10/547	CPCONLY	NEW
Y04S40/18	CPCONLY	NEW
Y04S50/16	CPCONLY	NEW

*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."

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- For a (D) CPC entry or indexing entry complete the Action column with "DELETE." IPC symbol does not need to be included in the IPC column.
- For an (N) 2000 series CPC entry which is positioned within the main trunk scheme (breakdown code) provide an IPC symbol and complete the action column with "NEW".
- For an (N) 2000 series CPC entry positioned at the end of the CPC scheme (orthogonal code), with no IPC equivalent, complete the IPC column with "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.