EUROPEAN PATENT OFFICE U.S. PATENT AND TRADEMARK OFFICE

CPC NOTICE OF CHANGES 769

DATE: JANUARY 1, 2020

PROJECT RP0646

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

Action	Subclass	Group(s)
SCHEME:		
Symbols Deleted:	H05B	33/0803, 33/0806, 33/0809, 33/0812, 33/0815, 33/0818, 33/0821, 33/0824, 33/0827, 33/083, 33/0842, 33/0845, 33/0848, 33/0851, 33/0854, 33/0857, 33/0866, 33/0869, 33/0872, 33/0884, 33/0887, 33/089, 33/0893, 33/0896
	H05B	37/00, 37/02, 37/0209, 37/0218, 37/0227, 37/0236, 37/0245, 37/0254, 37/0263, 37/0272, 37/0281, 37/029, 37/03, 37/032, 37/034, 37/036, 37/038, 37/04
	H05B	43/00, 43/02
		,
Symbols New:	H05B	45/00, 45/10, 45/12, 45/14, 45/18, 45/20, 45/22, 45/24, 45/28, 45/30, 45/305, 45/31, 45/315, 45/32, 45/325, 45/327, 45/33, 45/335, 45/34, 45/345, 45/347, 45/35, 45/355, 45/357, 45/3574, 45/3575, 45/3577, 45/3578, 45/36, 45/37, 45/3725, 45/375, 45/382, 45/382, 45/382, 45/392, 45/392, 45/395, 45/397, 45/40, 45/42, 45/44, 45/46, 45/48, 45/50, 45/52, 45/54, 45/56, 45/58, 45/60
	H05B	46/00
	H05B	47/00, 47/10, 47/105, 47/11, 47/115, 47/12, 47/125, 47/13, 47/135, 47/14, 47/155, 47/16, 47/165, 47/17, 47/175, 47/18, 47/185, 47/19, 47/195, 47/20, 47/21, 47/22, 47/23, 47/235, 47/24, 47/25, 47/26, 47/28, 47/29
Titles Changed:	G05F	subclass
Titles Changea.	H05B	subclass
	H05B	6/00
	H05B	7/00, 7/11, 7/144
	H05B	31/00
	H05B	33/00, 33/08
	H05B	39/00, 39/04
	H05B	41/00, 41/04, 41/30, 41/36, 41/44, 41/46
Warnings New:	H05B	33/08
	H05B	45/00, 45/10, 45/12, 45/18, 45/20, 45/28, 45/30, 45/305, 45/31, 45/315, 45/32, 45/325, 45/327, 45/33, 45/335, 45/34, 45/345, 45/347, 45/35, 45/355, 45/357, 45/3574, 45/3575, 45/3577, H05B 45/3578, 45/36, 45/37, 45/3725, 45/375, 45/38, 45/382, 45/385, 45/39, 45/392, 45/395, 45/397, 45/40, 45/42, 45/50, 45/52, 45/54, 45/56
	H05B	47/00, 47/10, 47/105, 47/11, 47/115, 47/12, 47/125, 47/13, 47/135, 47/14, 47/155, 47/16, 47/165, 47/17, 47/175,

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Action	Subclass	Group(s)
		47/19 47/195 47/10 47/105 47/00 47/01 47/00 47/02
		47/18, 47/185, 47/19, 47/195, 47/20, 47/21, 47/22, 47/23,
		47/235, 47/24, 47/25, 47/26, 47/28, 47/29
Notes New:	H05B	45/00
Tioles fiew.	H05B	47/00
	1103B	47/00
Notes Modified:	Н	section
	H05B	subclass
DEFINITIONS:		
Definitions Deleted:	H05B	33/0824, 33/0827, 33/083, 33/0842
	H05B	37/00
	H05B	43/00
Definitions New:	H05B	39/04
	H05B	41/04, 41/30
	H05B	45/00, 45/44, 45/46, 45/48
	H05B	47/00
Definitions Modified:		
	H05B	subclass
	H05B	6/00
	H05B	7/00
	H05B	31/00
	H05B	33/00, 33/08
	H05B	35/00
	H05B	39/00
	H05B	41/00

The following subclasses/groups are also impacted by this Notice of Changes: A41D, A41G, A63J, B60Q, B61L, F21K, F21V, F25D, G01J, G02B, G02F, G03B, G05B, G05D, G05F, G08B, G08C, G08G, G09G, H01L, H02H, H02J, H04L, H04N

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

1.	CLASSIF	ICATION SCHEME CHANGES
		A. New, Modified or Deleted Group(s)
		B. New, Modified or Deleted Warning(s)
	\boxtimes	C. New, Modified or Deleted Note(s)
		D. New, Modified or Deleted Guidance Heading(s)
2.	DEFINIT	IONS
		A. New or Modified Definitions (Full definition template)

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- B. Modified or Deleted Definitions (Definitions Quick Fix)
- 3. REVISION CONCORDANCE LIST (RCL)
- 4. \square CHANGES TO THE CPC-TO-IPC CONCORDANCE LIST (CICL)
- 5. CHANGES TO THE CROSS-REFERENCE LIST (CRL)

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1. CLASSIFICATION SCHEME CHANGES

A. New, Modified or Deleted Group(s)

SUBCLASS G05F – SYSTEMS FOR REGULATING ELECTRIC OR MAGNETIC VARIABLES (regulating the timing or recurrence frequency of pulses in radar or radio navigation systems G01S; closed loop systems for regulating non-electric variables by electric means G05D; regulating power supply of digital computers G06F 1/26; regulating electric power distribution networks H02J; regulating the charging of batteries H02J 7/00; regulation of the output of static converters, e.g. switching regulators H02M; regulation of the output of electric generators H02N, H02P 9/00, H03L; controlling transformers, reactors or choke coils H02P 13/00; regulating frequency response, gain, maximum output, amplitude or bandwidth of amplifiers H03G; regulating tuning of resonant circuits H03J; regulating characteristics of transmission lines H04B; electric control of X-ray apparatus H05G 1/30)

Type*	Symbol	Indent Level	<u>Title</u>	Transferred to#
		Number of dots	"CPC only" text should normally be enclosed in	
		(e.g. 0, 1, 2)	{curly brackets}**	
M	G05F	subclass	SYSTEMS FOR REGULATING ELECTRIC OR	
			MAGNETIC VARIABLES (regulating the timing	
			or recurrence frequency of pulses in radar or radio	
			navigation systems G01S; regulation of current or	
			voltage, specially adapted for use in electronic time-	
			pieces G04G 19/02; closed-loop systems for	
			regulating non-electric variables by electric means	
			G05D; regulating power supply of digital computers	
			G06F1/26; for obtaining desired operating	
			characteristics of electromagnets with armatures	
			H01F 7/18; regulating electric power distribution	
			networks H02J; regulating the charging of batteries	
			H02J7/00; regulation of the output of static	
			converters, e.g. switching regulators H02M;	
			regulation of the output of electric generators H02N,	
			H02P9/00; controlling transformers, reactors or	
			choke coils H02P13/00; regulating frequency	
			response, gain, maximum output, amplitude or	
			bandwidth of amplifiers H03G; regulating tuning of	
			resonant circuits H03J; regulating characteristics of	
			transmission lines H04B; controlling electric light	
			sources H05B 39/04, H05B 41/36, H05B 45/10,	
			H05B 45/20, H05B 47/10; electric control of X-ray	
			apparatus H05G1/30)	

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SUBCLASS H05B – ELECTRIC HEATING; ELECTRIC LIGHTING NOT OTHERWISE PROVIDED

FOR (apparatus for special application, see the relevant places, e.g. A47J, C21, C22, C23, F21, F24, F27)

Type*	Symbol	Indent Level	<u>Title</u> "CPC only" text should normally be	Transferred to [#]
		Number	<pre>enclosed in {curly brackets}**</pre>	
		of dots		
		(e.g. 0,		
M	H05B	1, 2) subclass	ELECTRIC HEATING; ELECTRIC	
IVI	позв	Subclass	LIGHTING NOT OTHERWISE PROVIDED	
			FOR	
M	H05B 6/00	0	Heating by electric, magnetic, or	
1,1	11032 0/00		electromagnetic fields (radiation therapy using	
			microwaves A61N5/02)	
M	H05B 7/00	0	Heating by electric discharge (plasma torches	
			H05H 1/26)	
M	H05B 7/11	2	Arrangements for conducting current to the	
		_	electrode terminals	
M	H05B 7/144	2	Power supplies specially adapted for heating by	
			electric discharge; Automatic control of power,	
M	H05B 31/00	0	e.g. by positioning of electrodes Electric arc lamps (regulating electric	
IVI	1103 D 31/00	U	characteristics of arcs G05F1/02)	
M	H05B 33/00	0	Electroluminescent light sources	
С	H05B 33/08	2	Circuit arrangements for operating	H05B 33/08,
			electroluminescent light sources (for operating	H05B 45/00
			light emitting diodes H05B 45/00)	
D	H05B 33/0803	3	{for light emitting diodes [LEDs] comprising	<administrative td="" transfer<=""></administrative>
	******		only inorganic semiconductor materials}	to H05B 45/00>
D	H05B 33/0806	4	{Structural details of the circuit}	<administrative 00="" 45="" h05b="" to="" transfer=""></administrative>
D	H05B 33/0809	5	{in the conversion stage}	<administrative 37="" 45="" h05b="" to="" transfer=""></administrative>
D	H05B 33/0812	6	{ with a controlled linear regulator}	<administrative td="" transfer<=""></administrative>
				to H05B 45/395>
D	H05B 33/0815	6	{with a controlled switching regulator}	<administrative 37="" 45="" h05b="" to="" transfer=""></administrative>
D	H05B 33/0818	7	{wherein HF AC or pulses are generated in the	<administrative td="" transfer<=""></administrative>
	******	_	final stage}	to H05B 45/37>
D	H05B 33/0821	5	{in the load stage}	<administrative 40="" 45="" h05b="" to="" transfer=""></administrative>
D	H05B 33/0824	6	{ with an active control inside the LED load	<administrative td="" transfer<=""></administrative>
	1105D 02/002=	-	configuration}	to H05B 45/44>
D	H05B 33/0827	7	{organized essentially in parallel	<administrative td="" transfer<=""></administrative>
D	H05B 33/083	7	configuration} {organized essentially in string configuration	to H05B 45/46> <administrative td="" transfer<=""></administrative>
0	11030 33/003	,	with shunting switches}	to H05B 45/48>
D	H05B 33/0842	4	{ with control (H05B33/0884 takes	<administrative td="" transfer<=""></administrative>
	<i></i>	·	precedence)}	to H05B 45/00>
D	H05B 33/0845	5	{of the light intensity (H05B33/0857 takes	<administrative td="" transfer<=""></administrative>
			precedence)}	to H05B 45/10>

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		Number of dots	enclosed in {curly brackets}**	
		(e.g. 0, 1, 2)		
D	H05B 33/0848	6	{involving load characteristic sensing means}	<administrative transfer<br="">to H05B 45/14></administrative>
D	H05B 33/0851	7	{ with permanent feedback from the light source}	<administrative 10="" 45="" h05b="" to="" transfer=""></administrative>
D	H05B 33/0854	6	{involving load external environment sensing means}	<administrative 10="" 45="" h05b="" to="" transfer=""></administrative>
D	H05B 33/0857	5	{of the color point of the light}	<administrative 20="" 45="" h05b="" to="" transfer=""></administrative>
D	H05B 33/086	6	{involving set point control means}	<administrative 20="" 45="" h05b="" to="" transfer=""></administrative>
D	H05B 33/0863	7	{by user interfaces}	<administrative 20="" 45="" h05b="" to="" transfer=""></administrative>
D	H05B 33/0866	6	{involving load characteristic sensing means}	<administrative 24="" 45="" h05b="" to="" transfer=""></administrative>
D	H05B 33/0869	7	{optical sensing means}	<administrative 22="" 45="" h05b="" to="" transfer=""></administrative>
D	H05B 33/0872	6	{involving load external environment sensing means}	<administrative 20="" 45="" h05b="" to="" transfer=""></administrative>
D	H05B 33/0884	4	{with monitoring or protection}	<administrative 45="" 50="" h05b="" to="" transfer=""></administrative>
D	H05B 33/0887	5	{of the conversion stage}	<administrative 45="" 50="" h05b="" to="" transfer=""></administrative>
D	H05B 33/089	5	{of the load stage}	<administrative 45="" 50="" h05b="" to="" transfer=""></administrative>
D	H05B 33/0893	6	{involving end of life detection of LEDs}	<administrative 45="" 58="" h05b="" to="" transfer=""></administrative>
D	H05B 33/0896	3	{for light emitting diodes [LEDs] comprising organic materials, e.g. polymer LEDs [PLEDs] or organic LEDs [OLEDs]}	<administrative transfer<br="">to H05B 45/60></administrative>
D	H05B 37/00	0	Circuit arrangements for electric light sources in general {(vehicle lights B60L1/14, B60Q; railways light signals B61L; lighting for photographic purposes G03B15/02, for advertising purposes G09F)}	<administrative transfer<br="">to H05B 47/00></administrative>
D	H05B 37/02	1	Controlling ({apparatus for performing colour music A63J17/00; regulating light by electrical means without regulating the light source itself G05D25/00}; regulating voltage or current G05F; {illuminated switch circuits G08B, G08C, H02B15/00; traffic signals G08G1/00})	<administrative transfer<br="">to H05B 47/10></administrative>
D	H05B 37/0209	2	{the instant of the ignition or of the extinction (H05B37/029 takes precedence; light or sound activated electronic switches H03K17/94)}	<administrative transfer<br="">to H05B 47/10></administrative>
D	H05B 37/0218	3	{by the ambient light}	<administrative 11="" 47="" h05b="" to="" transfer=""></administrative>

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		Number	enclosed in {curly brackets}**	
		of dots (e.g. 0,		
		1, 2)		
D	H05B 37/0227	3	{by detection only of parameters other than	<administrative td="" transfer<=""></administrative>
			ambient light, e.g. by sound detectors, by	to H05B 47/105>
D	H05B 37/0236	4	passive infra-red detectors}	<administrative td="" transfer<=""></administrative>
	HU3B 37/U230	4	{by detection of audible sound}	to H05B 47/12>
D	H05B 37/0245	3	{by remote-control involving emission and	<administrative td="" transfer<=""></administrative>
			detection units}	to H05B 47/175>
D	H05B 37/0254	4	{linked via data bus transmission}	<administrative 18="" 47="" h05b="" to="" transfer=""></administrative>
D	H05B 37/0263	4	{linked via power line carrier transmission}	<administrative td="" transfer<=""></administrative>
				to H05B 47/185>
D	H05B 37/0272	4	{linked via wireless transmission, e.g. IR transmission}	<administrative 19="" 47="" h05b="" to="" transfer=""></administrative>
D	H05B 37/0281	3	{by timing means (H05B37/0245 takes	<administrative td="" transfer<=""></administrative>
			precedence; time-controlled switching in	to H05B 47/16>
	11050 25/020	2	general G04, H01H, H03K)}	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
D	H05B 37/029	2	{a plurality of lamps following a preassigned sequence, e.g. theater lights, diapositive	<administrative 155="" 47="" h05b="" to="" transfer=""></administrative>
			projector}	to 1103D 47/1332
D	H05B 37/03	1	Detecting lamp failure {(monitoring vehicle	<administrative td="" transfer<=""></administrative>
			lamps B60Q11/00; changing to a reserve source	to H05B 47/20>
			of current H02J9/00)}	
D	H05B 37/032	2	{of a plurality of lamps connected in parallel}	<administrative 21="" 47="" h05b="" to="" transfer=""></administrative>
D	H05B 37/034	3	{ with communication between the lamps and a	<administrative td="" transfer<=""></administrative>
	H05D 27/026	2	central unit}	to H05B 47/22>
D	H05B 37/036	2	{of a plurality of lamps connected in series}	<administrative transfer<br="">to H05B 47/23></administrative>
D	H05B 37/038	3	{ with communication between the lamps and a	<administrative td="" transfer<=""></administrative>
D	H05D 27/04	2	central unit}	to H05B 47/235>
D	H05B 37/04	2	Circuits providing for substitution of the light source in case of its failure {, e.g. by switching	<administrative 29="" 47="" h05b="" to="" transfer=""></administrative>
			over to a reserve light source (incandescent	to 1103B 47/27/
			lamps with reserve body H01K)}	
M	H05B 39/00	0	Circuit arrangements or apparatus for operating	
			incandescent light sources	
M	H05B 39/04	0	Controlling	
M	H05B 41/00		Circuit arrangements or apparatus for igniting or operating discharge lamps	
M	H05B 41/04	2	Starting switches	
M	H05B 41/30	2	in which the lamp is fed by pulses, e.g. flash	
) A	H05D 41/26	2	lamp	
M	H05B 41/36	3	Controlling	
M	H05B 41/44	3	for providing special optical effects, e.g. progressive motion of light	
		I	progressive motion of fight	

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		Level	"CPC only" text should normally be	
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		of dots		
		(e.g. 0,		
		1, 2)		
M	H05B 41/46	2	Circuits providing for substitution in case of failure of the lamp	
D	H05B 43/00	0	Circuit arrangements for light sources, not	<administrative td="" transfer<=""></administrative>
			otherwise provided for (H05B37/00 takes precedence)	to H05B 47/00>
D	H05B 43/02	1	for light sources using a charge of combustible	<administrative td="" transfer<=""></administrative>
		_	material {, e.g. magnesium lamps}	to H05B 46/00>
Q	H05B 45/00	0	Circuit arrangements for operating light	H05B 45/00,
			emitting diodes [LED]	H05B 45/30,
				H05B 45/305,
				H05B 45/31,
				H05B 45/315,
				H05B 45/32,
				H05B 45/325,
				H05B 45/327,
				H05B 45/33,
				H05B 45/335,
				H05B 45/34,
				H05B 45/345,
				H05B 45/347,
				H05B 45/35,
				H05B 45/355,
				H05B 45/357,
				H05B 45/3574,
				H05B 45/3575, H05B 45/3577,
				H05B 45/3577,
				H05B 45/36,
				H05B 45/37,
				H05B 45/3725,
				H05B 45/375,
				H05B 45/38,
				H05B 45/382,
				H05B 45/385,
				H05B 45/39,
				H05B 45/392,
				H05B 45/395,
				H05B 45/397
Q	H05B 45/10	1	Controlling the intensity of the light	H05B 45/10,
				H05B 45/12,
				H05B 45/18
N	H05B 45/12	2	using optical feedback	
N	H05B 45/14	2	using electrical feedback from LEDs or from	
			LED modules	
N	H05B 45/18	2	using temperature feedback	
Q	H05B 45/20	1	Controlling the colour of the light	H05B 45/20,
				H05B 45/28

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		of dots		
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N	H05B 45/22	2	using optical feedback	
N	H05B 45/24	2	using electrical feedback from LEDs or from LED modules	
N	H05B 45/28	2	using temperature feedback	
N	H05B 45/30	1	Driver circuits	
N	H05B 45/305	2	Frequency-control circuits	
N	H05B 45/31	2	Phase-control circuits	
N	H05B 45/315	3	Reverse phase-control circuits	
N	H05B 45/32	2	Pulse-control circuits	
N	H05B 45/325	3	Pulse-width modulation [PWM]	
N	H05B 45/327	3	Burst dimming	
N	H05B 45/33	3	Pulse-amplitude modulation [PAM]	
N	H05B 45/335	3	Pulse-frequency modulation [PFM]	
N	H05B 45/34	2	Voltage stabilisation; Maintaining constant voltage	
N	H05B 45/345	2	Current stabilisation; Maintaining constant current	
N	H05B 45/347	2	Dynamic headroom control [DHC]	
N	H05B 45/35	2	Balancing circuits	
N	H05B 45/355	2	Power factor correction [PFC]; Reactive power compensation	
N	H05B 45/357	2	specially adapted for retrofit LED light sources	
N	H05B 45/3574	3	Emulating the electrical or functional characteristics of incandescent lamps	
N	H05B 45/3575	4	by means of dummy loads or bleeder circuits, e.g. for dimmers	
N	H05B 45/3577	4	Emulating the dimming characteristics, brightness or colour temperature of incandescent lamps	
N	H05B 45/3578	3	Emulating the electrical or functional characteristics of discharge lamps	
N	H05B 45/36	2	Circuits for reducing harmonics, ripples or electromagnetic interferences [EMI]	
Q	H05B 45/37	2	Converter circuits	H05B 45/37, H05B 45/3725, H05B 45/375, H05B 45/38, H05B 45/382, H05B 45/385, H05B 45/39, H05B 45/392
N	H05B 45/3725	3	Switched mode power supply [SMPS]	
N	H05B 45/375	4	using buck topology	
N	H05B 45/38	4	using boost topology	
N	H05B 45/382	4	with galvanic isolation between input and output	

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N	H05B 45/385	4	using flyback topology	
N	H05B 45/39	4	Circuits containing inverter bridges	
N	H05B 45/392	4	wherein the LEDs are placed as freewheeling diodes at the secondary side of an isolation transformer	
Q	H05B 45/395	2	Linear regulators	H05B 45/395, H05B 45/397
N	H05B 45/397	3	Current mirror circuits	
Q	H05B 45/40	1	Details of LED load circuits	H05B 45/40, H05B 45/42
N	H05B 45/42	2	Antiparallel configurations	
N	H05B 45/44	2	with an active control inside an LED matrix	
N	H05B 45/46	3	having LEDs disposed in parallel lines	
N	H05B 45/48	3	having LEDs organised in strings and incorporating parallel shunting devices	
Q	H05B 45/50	1	responsive to malfunctions of LEDs; responsive to LED life; Protective circuits	H05B 45/50, H05B 45/52, H05B 45/54, H05B 45/56
N	H05B 45/52	2	in a parallel array of LEDs	
N	H05B 45/54	2	in a series array of LEDs	
N	H05B 45/56	2	involving measures to prevent abnormal temperature of the LEDs	
N	H05B 45/58	2	involving end of life detection of LEDs	
N	H05B 45/60	1	{Circuit arrangements for operating light emitting diodes [LEDs] comprising organic materials, e.g. polymer LEDs [PLED] or organic LEDs [OLED]}	
N	H05B 46/00	0	Circuit arrangements for light sources using a charge of combustible material	

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Type*	Symbol	Indent	<u>Title</u>	Transferred to [#]
<u>1 y p c</u>	<u> </u>	Level	"CPC only" text should normally be	Transferred to
		Number	enclosed in {curly brackets}**	
		of dots	chelosed in feurly brackets	
		(e.g. 0, 1, 2)		
Q	H05B 47/00	0	Circuit arrangements for operating light sources	H05B 47/00,
			in general, i.e. where the type of the light	H05B 47/10,
			source is not relevant	H05B 47/105,
				H05B 47/11,
				H05B 47/115,
				H05B 47/12,
				H05B 47/125,
				H05B 47/13,
				H05B 47/135,
				H05B 47/14,
				H05B 47/155,
				H05B 47/16,
				H05B 47/165,
				H05B 47/17,
				H05B 47/175,
				H05B 47/18,
				H05B 47/185,
				H05B 47/19,
				H05B 47/195,
				H05B 47/195, H05B 47/20,
				H05B 47/20, H05B 47/21,
				H05B 47/21, H05B 47/22,
				· ·
				H05B 47/23,
				H05B 47/235,
				H05B 47/24,
				H05B 47/25,
				H05B 47/26,
				H05B 47/28,
	H05D 47/10	1		H05B 47/29
Q	H05B 47/10	1	Controlling the light source	H05B 47/10,
				H05B 47/165,
	1105D 47/105	2		H05B 47/17
Q	H05B 47/105	2	in response to determined parameters	H05B 47/105,
				H05B 47/115,
				H05B 47/125,
				H05B 47/13,
				H05B 47/135,
				H05B 47/14
N	H05B 47/11	3	by determining the brightness or colour	
			temperature of ambient light	
N	H05B 47/115	3	by determining the presence or movement of	
			objects or living beings	
N	H05B 47/12	4	by detecting audible sound	
N	H05B 47/125	4	by using cameras	
N	H05B 47/13	4	by using passive infrared detectors	

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Type*	Symbol	Indent Level Number of dots (e.g. 0,	Title "CPC only" text should normally be enclosed in {curly brackets}**	Transferred to#
		<u>1, 2)</u>		
N	H05B 47/135	3	by determining the type of light source being controlled (electrical parameters of light source being controlled H05B 47/14)	
N	H05B 47/14	3	by determining electrical parameters of the light source	
N	H05B 47/155	2	Coordinated control of two or more light sources	
N	H05B 47/16	2	by timing means	
N	H05B 47/165	2	following a pre-assigned programmed sequence; Logic control [LC]	
N	H05B 47/17	2	Operational modes, e.g. switching from manual to automatic mode or prohibiting specific operations	
N	H05B 47/175	2	by remote control	
N	H05B 47/18	3	via data-bus transmission	
N	H05B 47/185	3	via power line carrier transmission	
Q	H05B 47/19	3	via wireless transmission	H05B 47/19, H05B 47/195
N	H05B 47/195	4	the transmission using visible or infrared light	
Q	H05B 47/20	1	Responsive to malfunctions or to light source life; for protection	H05B 47/20, H05B 47/24, H05B 47/25, H05B 47/26, H05B 47/28
N	H05B 47/21	2	of two or more light sources connected in parallel	
N	H05B 47/22	3	{with communication between the lamps and a central unit}	
N	H05B 47/23	2	of two or more light sources connected in series	
N	H05B 47/235	3	{ with communication between the lamps and a central unit}	
N	H05B 47/24	2	Circuit arrangements for protecting against overvoltage	
N	H05B 47/25	2	Circuit arrangements for protecting against overcurrent	
N	H05B 47/26	2	Circuit arrangements for protecting against earth faults	
N	H05B 47/28	2	Circuit arrangements for protecting against abnormal temperature	
N	H05B 47/29	2	Circuits providing for substitution of the light source in case of its failure	

^{*}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; T = 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

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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).
- 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. New, Modified or Deleted Warning(s)

SUBCLASS H05B – ELECTRIC HEATING; ELECTRIC LIGHTING NOT OTHERWISE PROVIDED FOR (apparatus for special application, see the relevant places, e.g. A47J, C21, C22, C23, F21, F24, F27)

Type*	Location	Old Warning	New/Modified Warning
N	H05B 33/08		Group H05B 33/08 is impacted by reclassification into group H05B 45/00. Groups H05B 33/08 and H05B 45/00 should be considered in order to perform a complete search.
N	H05B 45/00		Group H05B 45/00 is incomplete pending reclassification of documents from group H05B 33/08. Group H05B 45/00 is also impacted by reclassification into groups H05B 45/30 - H05B 45/397. Groups H05B 33/08, H05B 45/00, and H05B 45/30-H05B 45/397 should be considered in order to perform a complete search
N	H05B 45/10		Group H05B 45/10 is impacted by reclassification into groups H05B 45/12 and H05B 45/18. Groups H05B 45/10, H05B 45/12, and H05B 45/18 should be considered in order to perform a complete search.
N	H05B 45/12		Group H05B 45/12 is incomplete pending reclassification of documents from group H05B 45/10. Groups H05B 45/10 and H05B 45/12 should be considered in order to perform a complete search.
N	H05B 45/18		Group H05B 45/18 is incomplete pending reclassification of documents from group H05B 45/10. Groups H05B 45/10 and H05B 45/18 should be considered in order to perform a complete search.
N	H05B 45/20		Group H05B 45/20 is impacted by reclassification into group H05B 45/28. Groups H05B 45/20 and H05B 45/28 should be considered in order to perform a complete search.
N	H05B 45/28		Group H05B 45/28 is incomplete pending reclassification of documents from group H05B 45/20. Groups H05B 45/20 and H05B 45/28 should be considered in order to perform a complete search.
N	H05B 45/30		Group H05B 45/30 is incomplete pending reclassification of documents from group H05B 45/00. Groups H05B 45/00 and H05B 45/30 should be considered in order to perform a complete search.
N	H05B 45/305		Group H05B 45/305 is incomplete pending reclassification of documents from group H05B 45/00. Groups H05B 45/00 and H05B 45/305 should be considered in order to perform a complete search.
N	H05B 45/31		Group H05B 45/31 is incomplete pending reclassification of documents from group H05B 45/00. Groups H05B 45/00 and H05B 45/31 should be considered in order to perform a complete search.
N	H05B 45/315		Group H05B 45/315 is incomplete pending reclassification of documents from group H05B 45/00. Groups H05B 45/00 and H05B 45/315 should be considered in order to perform a complete search.

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Type*	Location	Old Warning	New/Modified Warning
N	H05B 45/32		Group H05B 45/32 is incomplete pending reclassification of documents from group H05B 45/00. Groups H05B 45/00 and H05B 45/32 should be considered in order to perform a complete search.
N	H05B 45/325		Group H05B 45/325 is incomplete pending reclassification of documents from group H05B 45/00. Groups H05B 45/00 and H05B 45/325 should be considered in order to perform a complete search.
N	H05B 45/327		Group H05B 45/327 is incomplete pending reclassification of documents from group H05B 45/00. Groups H05B 45/00 and H05B 45/327 should be considered in order to perform a complete search.
N	H05B 45/33		Group H05B 45/33 is incomplete pending reclassification of documents from group H05B 45/00. Groups H05B 45/00 and H05B 45/33 should be considered in order to perform a complete search.
N	H05B 45/335		Group H05B 45/335 is incomplete pending reclassification of documents from group H05B 45/00. Groups H05B 45/00 and H05B 45/335 should be considered in order to perform a complete search.
N	H05B 45/34		Group H05B 45/34 is incomplete pending reclassification of documents from group H05B 45/00. Groups H05B 45/00 and H05B 45/34 should be considered in order to perform a complete search.
N	H05B 45/345		Group H05B 45/345 is incomplete pending reclassification of documents from group H05B 45/00. Groups H05B 45/00 and H05B 45/345 should be considered in order to perform a complete search.
N	H05B 45/347		Group H05B 45/347 is incomplete pending reclassification of documents from group H05B 45/00. Groups H05B 45/00 and H05B 45/347 should be considered in order to perform a complete search.
N	H05B 45/35		Group H05B 45/35 is incomplete pending reclassification of documents from group H05B 45/00. Groups H05B 45/00 and H05B 45/35 should be considered in order to perform a complete search.
N	H05B 45/355		Group H05B 45/355 is incomplete pending reclassification of documents from group H05B 45/00. Groups H05B 45/00 and H05B 45/355 should be considered in order to perform a complete search.
N	H05B 45/357		Group H05B 45/357 is incomplete pending reclassification of documents from group H05B 45/00. Groups H05B 45/00 and H05B 45/357 should be considered in order to perform a complete search.
N	H05B 45/3574		Group H05B 45/3574 is incomplete pending reclassification of documents from group H05B 45/00. Groups H05B 45/00 and H05B 45/3574 should be considered in order to perform a complete search.

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Type*	Location	Old Warning	New/Modified Warning
N	H05B 45/3575		Group H05B 45/3575 is incomplete pending reclassification of documents from group H05B 45/00. Groups H05B 45/00 and H05B 45/3575 should be considered in order to perform a complete search.
N	H05B 45/3577		Group H05B 45/3577 is incomplete pending reclassification of documents from group H05B 45/00. Groups H05B 45/00 and H05B 45/3577 should be considered in order to perform a complete search.
N	H05B 45/3578		Group H05B 45/3578 is incomplete pending reclassification of documents from group H05B 45/00. Groups H05B 45/00 and H05B 45/3578 should be considered in order to perform a complete search.
N	H05B 45/36		Group H05B 45/36 is incomplete pending reclassification of documents from group H05B 45/00. Groups H05B 45/00 and H05B 45/36 should be considered in order to perform a complete search.
N	H05B 45/37		Group H05B 45/37 is incomplete pending reclassification of documents from group H05B 45/00. Group H05B 45/37 is also impacted by reclassification into groups H05B 45/3725, H05B 45/375, H05B 45/38, H05B 45/382, H05B 45/38, H05B 45/39, and H05B 45/392. All groups listed in this Warning should be considered in order to perform a complete search.
N	H05B 45/3725		Group H05B 45/3725 is incomplete pending reclassification of documents from groups H05B 45/00 and H05B 45/37. Groups H05B 45/00, H05B 45/37, and H05B 45/3725 should be considered in order to perform a complete search.
N	H05B 45/375		Group H05B 45/375 is incomplete pending reclassification of documents from groups H05B 45/00 and H05B 45/37. Groups H05B 45/00, H05B 45/37, and H05B 45/375 should be considered in order to perform a complete search.
N	H05B 45/38		Group H05B 45/38 is incomplete pending reclassification of documents from groups H05B 45/00 and H05B 45/37. Groups H05B 45/00, H05B 45/37, and H05B 45/38 should be considered in order to perform a complete search.
N	H05B 45/382		Group H05B 45/382 is incomplete pending reclassification of documents from groups H05B 45/00 and H05B 45/37. Groups H05B 45/00, H05B 45/37, and H05B 45/382 should be considered in order to perform a complete search.
N	H05B 45/385		Group H05B 45/385 is incomplete pending reclassification of documents from groups H05B 45/00 and H05B 45/37. Groups H05B 45/00, H05B 45/37, and H05B 45/385 should be considered in order to perform a complete search.
N	H05B 45/39		Group H05B 45/39 is incomplete pending reclassification of documents from groups H05B 45/00 and H05B 45/37. Groups H05B 45/00, H05B 45/37, and H05B 45/39 should be considered in order to perform a complete search.
N	H05B 45/392		Group H05B 45/392 is incomplete pending reclassification of documents from groups H05B 45/00 and H05B 45/37. Groups H05B 45/00, H05B 45/37, and H05B 45/392 should be considered in order to perform a complete search.

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Type*	Location	Old Warning	New/Modified Warning
N	H05B 45/395		Group H05B 45/395 is incomplete pending reclassification of documents from group H05B 45/00. Group H05B 45/395 is also impacted by reclassification into group H05B 45/397. Groups H05B 45/00, H05B 45/395, and H05B 45/397 should be considered in order to perform a complete search
N	H05B 45/397		Group H05B 45/397 is incomplete pending reclassification of documents from groups H05B 45/00 and H05B 45/395. Groups H05B 45/00, H05B 45/395, and H05B 45/397 should be considered in order to perform a complete search.
N	H05B 45/40		Group H05B 45/40 is impacted by reclassification into group H05B 45/42. Groups H05B 45/40 and H05B 45/42 should be considered in order to perform a complete search.
N	H05B 45/42		Group H05B 45/42 is incomplete pending reclassification of documents from group H05B 45/40. Groups H05B 45/40 and H05B 45/42 should be considered in order to perform a complete search.
N	H05B 45/50		Group H05B 45/50 is impacted by reclassification into groups H05B 45/52, H05B 45/54, and H05B 45/56. All groups listed in this Warning should be considered in order to perform a complete search.
N	H05B 45/52		Group H05B 45/52 is incomplete pending reclassification of documents from group H05B 45/50. Groups H05B 45/50 and H05B 45/52 should be considered in order to perform a complete search.
N	H05B 45/54		Group H05B 45/54 is incomplete pending reclassification of documents from group H05B 45/50. Groups H05B 45/50 and H05B 45/54 should be considered in order to perform a complete search.
N	H05B 45/56		Group H05B 45/56 is incomplete pending reclassification of documents from group H05B 45/50. Groups H05B 45/50 and H05B 45/56 should be considered in order to perform a complete search.
N	H05B 47/00		Group H05B 47/00 is impacted by reclassification into groups H05B 47/10-H05B 47/29. Groups H05B 47/00 and H05B 47/10-H05B 47/29 should be considered in order to perform a complete search.
N	H05B 47/10		Group H05B 47/10 is incomplete pending reclassification of documents from group H05B 47/00. Group H05B 47/10 is also impacted by reclassification into groups H05B 47/165 and H05B 47/17. All groups listed in this Warning should be considered in order to perform a complete search.
N	H05B 47/105		Group H05B 47/105 is incomplete pending reclassification of documents from group H05B 47/00. Group H05B 47/105 is also impacted by reclassification into groups H05B 47/115, H05B 47/125, H05B 47/13, H05B 47/135, and H05B 47/14. All groups listed in this Warning should be considered in order to perform a complete search.
N	H05B 47/11		Group H05B 47/11 is incomplete pending reclassification of documents from group H05B 47/00. Groups H05B 47/00 and H05B 47/11 should be considered in order to perform a complete search.

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Type*	Location	Old Warning	New/Modified Warning
N	H05B 47/115		Group H05B 47/115 is incomplete pending reclassification of documents from groups H05B 47/00 and H05B 47/105. Groups H05B 47/00, H05B 47/105, and H05B 47/115 should be considered in order to perform a complete search.
N	H05B 47/12		Group H05B 47/12 is incomplete pending reclassification of documents from group H05B 47/00. Groups H05B 47/00 and H05B 47/12 should be considered in order to perform a complete search.
N	H05B 47/125		Group H05B 47/125 is incomplete pending reclassification of documents from groups H05B 47/00 and H05B 47/105. Groups H05B 47/00, H05B 47/105, and H05B 47/125 should be considered in order to perform a complete search.
N	H05B 47/13		Group H05B 47/13 is incomplete pending reclassification of documents from groups H05B 47/00 and H05B 47/105. Groups H05B 47/00, H05B 47/105, and H05B 47/13 should be considered in order to perform a complete search.
N	H05B 47/135		Group H05B 47/135 is incomplete pending reclassification of documents from groups H05B 47/00 and H05B 47/105. Groups H05B 47/00, H05B 47/105, and H05B 47/135 should be considered in order to perform a complete search.
N	H05B 47/14		Group H05B 47/14 is incomplete pending reclassification of documents from groups H05B 47/00 and H05B 47/105. Groups H05B 47/00, H05B 47/105, and H05B 47/14 should be considered in order to perform a complete search.
N	H05B 47/155		Group H05B 47/155 is incomplete pending reclassification of documents from group H05B 47/00. Groups H05B 47/00 and H05B 47/155 should be considered in order to perform a complete search.
N	H05B 47/16		Group H05B 47/16 is incomplete pending reclassification of documents from group H05B 47/00. Groups H05B 47/00 and H05B 47/16 should be considered in order to perform a complete search.
N	H05B 47/165		Group H05B 47/165 is incomplete pending reclassification of documents from groups H05B 47/00 and H05B 47/10. Groups H05B 47/00, H05B 47/10, and H05B 47/165 should be considered in order to perform a complete search.
N	H05B 47/17		Group H05B 47/17 is incomplete pending reclassification of documents from groups H05B 47/00 and H05B 47/10. Groups H05B 47/00, H05B 47/10, and H05B 47/17 should be considered in order to perform a complete search.
N	H05B 47/175		Group H05B 47/175 is incomplete pending reclassification of documents from group H05B 47/00. Groups H05B 47/00 and H05B 47/175 should be considered in order to perform a complete search.
N	H05B 47/18		Group H05B 47/18 is incomplete pending reclassification of documents from group H05B 47/00. Groups H05B 47/00 and H05B 47/18 should be considered in order to perform a complete search.

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Type*	Location	Old Warning	New/Modified Warning
N	H05B 47/185		Group H05B 47/185 is incomplete pending reclassification of documents from group H05B 47/00. Groups H05B 47/00 and H05B 47/185 should be considered in order to perform a complete search.
N	H05B 47/19		Group H05B 47/19 is incomplete pending reclassification of documents from group H05B 47/00. Group H05B 47/19 is also impacted by reclassification into group H05B 47/195. Groups H05B 47/00, H05B 47/19, and H05B 47/195 should be considered in order to perform a complete search
N	H05B 47/195		Group H05B 47/195 is incomplete pending reclassification of documents from groups H05B 47/00 and H05B 47/19. Groups H05B 47/00, H05B 47/19, and H05B 47/195 should be considered in order to perform a complete search.
N	H05B 47/20		Group H05B 47/20 is incomplete pending reclassification of documents from group H05B 47/00. Group H05B 47/20 is also impacted by reclassification into groups H05B 47/24, H05B 47/25, H05B 47/26, and H05B 47/28. All groups listed in this Warning should be considered in order to perform a complete search.
N	H05B 47/21		Group H05B 47/21 is incomplete pending reclassification of documents from group H05B 47/00. Groups H05B 47/00 and H05B 47/21 should be considered in order to perform a complete search.
N	H05B 47/22		Group H05B 47/22 is incomplete pending reclassification of documents from group H05B 47/00. Groups H05B 47/00 and H05B 47/22 should be considered in order to perform a complete search.
N	H05B 47/23		Group H05B 47/23 is incomplete pending reclassification of documents from group H05B 47/00. Groups H05B 47/00 and H05B 47/23 should be considered in order to perform a complete search.
N	H05B 47/235		Group H05B 47/235 is incomplete pending reclassification of documents from group H05B 47/00. Groups H05B 47/00 and H05B 47/235 should be considered in order to perform a complete search.
N	H05B 47/24		Group H05B 47/24 is incomplete pending reclassification of documents from groups H05B 47/00 and H05B 47/20. Groups H05B 47/00, H05B 47/20, and H05B 47/24 should be considered in order to perform a complete search.
N	H05B 47/25		Group H05B 47/25 is incomplete pending reclassification of documents from groups H05B 47/00 and H05B 47/20. Groups H05B 47/00, H05B 47/20, and H05B 47/25 should be considered in order to perform a complete search.
N	H05B 47/26		Group H05B 47/26 is incomplete pending reclassification of documents from groups H05B 47/00 and H05B 47/20. Groups H05B 47/00, H05B 47/20, and H05B 47/26 should be considered in order to perform a complete search.
N	H05B 47/28		Group H05B 47/28 is incomplete pending reclassification of documents from groups H05B 47/00 and H05B 47/20. Groups H05B 47/00, H05B 47/20, and H05B 47/28 should be considered in order to perform a complete search.

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Type*	Location	Old Warning	New/Modified Warning
N	H05B 47/29		Group H05B 47/29 is incomplete pending reclassification of documents from group H05B 47/00. Groups H05B 47/00 and H05B 47/29 should be considered in order to perform a complete search.

^{*}N = new warning, M = modified warning, D = deleted warning

NOTE: The "Location" column only requires the symbol PRIOR to the location of the warning. No further directions such as "before" or "after" are required.

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C. New, Modified or Deleted Note(s)

Type*	Location	Old Note	New/Modified Note
M	H	III. In this section, the following special cases occur: a. among the general applications covered by sections other than section H, it is worth noting that electric heating in general is covered by subclasses F24D or F24H or class F27, and that electric lighting in general is partly covered by class F21, since in section H (see I(c), above) there are places in H05B which cover the same technical subjects; b. in the two cases referred to under (a), above, the subclasses of section F, which deal with the respective subjects, essentially cover in the first place the whole mechanical aspect of the apparatus or devices, whereas the electrical aspect, as such, is covered by subclass H05B; c. in the case of lighting, this mechanical aspect should be taken to cover the material arrangement of the various electric elements, i.e., their geometrical or physical position in relation to one another; this aspect is covered by subclasses of class F21, the elements themselves and the primary circuits remaining in section H. The same applies to electric light sources, when combined with light sources of a different kind. These are covered by subclass H05B, whereas the physical arrangement which their combination constitutes is covered by subclasses of class F21; d. as regards heating, not only the electric elements and circuitry designs, as such, are covered by subclass H05B, but also the electric aspects of their arrangement, where these concern cases of general application; electric furnaces being considered as such. The physical disposition of the electric elements in furnaces is covered by section F. If a comparison is made with electric welding circuits, which are covered by subclass B23K in connection with welding, it can be seen that electric heating is not covered by the general rule stated in II, above.	DELETE entirely only Note III.

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SUBCLASS H05B – ELECTRIC HEATING; ELECTRIC LIGHTING NOT OTHERWISE PROVIDED FOR (apparatus for special application, see the relevant places, e.g. A47J, C21, C22, C23, F21, F24, F27)

Type*	Location	Old Note	New/Modified Note
M M	H05B	Attention is drawn to the Note (paragraph III) following the contents of Section of Section H	REPLACE the existing note with the following NEW note. In this subclass, the following special cases occur: a. Among the general applications covered by sections other than section H, it is worth noting that electric heating in general is covered by subclasses F24D or F24H or class F27, and that electric lighting in general is partly covered by class F21, since in section H (see Note I(c) after the title of section H) there are places in H05B which cover the same technical subjects; b. In the two cases referred to in Note (a) above, the subclasses of section F, which deal with the respective subjects, essentially cover in the first place the whole mechanical aspect of the apparatus or devices, whereas the electrical aspect, as such, is covered by subclass H05B; c. In the case of lighting, this mechanical aspect should be taken to cover the material arrangement of the various electric elements, i.e. their geometrical or physical position in relation to one
			c. In the case of lighting, this mechanical aspect should be taken to cover the material arrangement of the various electric elements, i.e. their geometrical or physical position in relation to one another; this aspect is covered by subclasses of class F21, the elements themselves and the primary circuits remaining in section H. The same applies to electric light sources, when combined with light sources of a different kind. These are covered by subclass H05B, whereas the physical arrangement which their combination constitutes is covered by subclasses of class F21; d. As regards heating, not only the electric elements and circuitry designs, as such, are covered by subclass H05B, but also the electric aspects of their arrangement, where these concern cases of general application; electric furnaces being considered as such. The physical disposition of
			the electric elements in furnaces is covered by section F. If a comparison is made with electric welding circuits, which are covered by subclass B23K in connection with welding, it can be seen that electric heating is not covered by the general rule stated in Note II after the title of section H.
N	H05B 45/00		In this group, multi-aspect classification is applied, so that subject matter characterised by aspects covered by more than one of its subgroups, which is considered to represent information of interest for search, may also be classified in each of those subgroups.

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Type*	Location	Old Note	New/Modified Note
N	H05B 47/00		In this group, multi-aspect classification is applied, so that subject matter characterised by aspects covered by more than one of its subgroups, which is considered to represent information of interest for search, may also be classified in each of those subgroups.

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 NEW definitions.

H05B 39/04

References

Informative references:

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

Regulating electric variables in general	G05F
--	------

H05B 41/04

References

Informative references

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

	H01J7/30, H01J17/30, H01J61/54
Switches in general	H01H

H05B 41/30

References

Informative references

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

Welding using accumulated energy	B23K 11/24
Circuit arrangements for gas discharge lasers	H01S 3/097

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Electrical pulse generators with charge and discharge of an	H03K 3/53
accumulating element	

H05B 45/00

Definition statement

This place covers:

Time switching, focus/target/beam control, LED flashes, LEDs as sensors, power saving aspects, shift registers control (simple sequences), emergency lights (when no other aspect is more relevant).

References

Informative references

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

Controlling of light sources in general	H05B 47/10
Controlling by the ambient light	H05B 47/11
Controlling in response to parameters	H05B 47/105
Control using data bus linked networks	H05B 47/18
Control using power line carrier linked networks	H05B 47/185
Control using wireless networks	H05B 47/19
Control using timing means	H05B 47/16

Special rules of classification

When classifying in H05B45/00, further classification is made in H05B 47/00, for aspects, which are not lamp specific, whenever appropriate.

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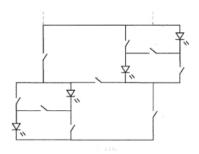
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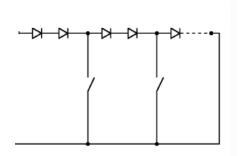
H05B 45/44

Definition statement

This place covers:

Adaptive matrixes, antiparallel arrangements with an internal active control.





H05B 45/46

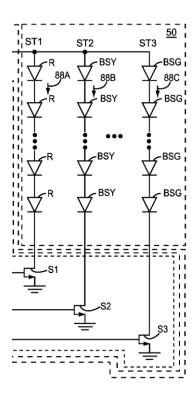
Definition statement

This place covers:

LED loads formed by parallel strings of LEDs, wherein each of said strings may be individually controlled by a circuitry.

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RGBs, current mirroring, active current balancers, minimum voltage selectors, in general when the parallel branches are gated for some purpose.

Special rules of classification

This symbol should be given as CCI when the invention relates to the load configuration.

This symbol should be given as CCA when a load matching the definition can be observed in the document, but it is not the subject-matter of the invention or no details of it are provided.

H05B 45/48

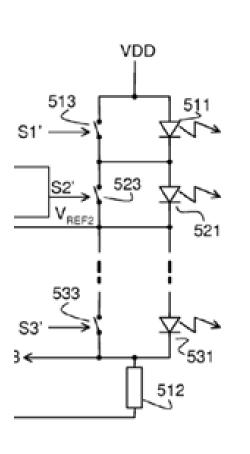
Definition statement

This place covers:

LED loads formed of LED strings, wherein each of said LEDs may be individually controlled by a parallel device, e.g. a switch, transistor, MOSFET, Zener diode or resistor.

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Typical problems appearing in the documents with this symbol are: accommodation of potential in a chain of series-connected LEDs, adaptation of the number of LEDs to various supplied voltages.

Special rules of classification

This symbol should be given as CCI when the invention relates to the load configuration.

This symbol should be given as CCA when a load matching the definition can be observed in the document, but it is not the subject matter of the invention or no details of it are provided.

H05B 47/00

Definition statement

This place covers:

Circuit arrangements for controlling light sources, where the type of light source is not relevant or not disclosed. Where the focus of the control is in the application and not in

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the light source, e.g. controlling the light source in response to some external conditions, e.g. light dependent, occupancy or data communication.

References

Informative references

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

Wake-up lights	A61M 21/02
Radiation therapy	A61N 5/00
Colour music	A63J 17/00
Vehicle lights	B60L 1/14, B60Q
Monitoring vehicle lamps	B60Q 11/00
Railways light signals	B61L
Lighting for photographic purposes	G03B 15/02
Time controlled switching	G04, H01H, H03K
Building automation systems	G05B 15/02
Blinds or shutters	G05D 25/00
Regulating electric variables, e.g. voltage or current	G05F
Illuminated switch circuits	G08B, G08C, H02B 15/00
Traffic lights	G08G 1/00
Advertising	G09F
Light or sound activated switches	H03K 17/00
Transmission of digital information	H04L

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2. A. DEFINITIONS (modified)

H05B

References out of a residual place

<u>Insert</u>: The following <u>new</u> row in the References out of a residual place table.

Electric lighting	F21
-------------------	-----

Replace: The word "Lasers" in the row (Lasers...H01S) with the following word.

Laser

H05B 6/00

Limiting References

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

For therapeutic purposes	A61N 5/00

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

Radiation therapy using microwaves A61N 5/02
--

Application-oriented references

Replace: In the Application-oriented references table, only the text in the first

column with the following new text.

Single-crystal growth by zone-melting or refining by	C30B 13/20
zone-melting using heating of the molten zone by	
induction, e.g. hot wire technique	

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Informative References

Insert: A comma after the word "heating" as shown in the row below.

Trolleys with heating, cooling or ventilating	A47B 31/02
means	

<u>Insert</u>: The word: "of" <u>before</u> the word "particular" as shown in the row below.

Kitchen equipment of specific material or of	A47J 36/02,
particular construction	A47J 27/002

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

Joining of preformed parts by heating of	B29C 65/02
plastics or substances in a plastic state	

Replace: This text: "Transparent panels (for doors specially adapted for stoves or

ranges)" with the following revised text.

Transparent panels, e.g. for doors specially	F24C 15/04
adapted for stoves or ranges	

H05B 7/00

Limiting References

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

Electron beam or ion beam tubes for localised	H01J 37/30
treatment of objects	

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Informative References

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

Electron beam or ion beam tubes for localised	H01J 37/30
treatment of objects	

H05B 31/00

Limiting References

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

Luminaries and their mechanical construction	F21
Electric discharge tubes or discharge lamps	H01J

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

Informative References

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

Circuit for gas discharge lamps	H05B 41/00
Electric lighting	F21
Electric discharge tubes or discharge lamps	H01J
Electric arc lamps with non-consumable electrodes	H01J 61/00

H05B 33/00

Replace:

Definition statement

The existing statement in the Definition statement section with the following <u>new</u> statements.

- Structural details of electroluminescent light sources
- Chemical elements, chemical compositions or chemical compounds capable of emitting light

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• Circuit arrangements for driving said electroluminescent sources.

Limiting references

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

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

Informative references

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

Luminescent scales or hands	G01D 13/20, G01D 13/28
Luminescent dials	G09F 13/20
Conductive layers on isolated substrate	H01B 1/00
Discharge lamps	H01J 61/00 - H01J 65/00
Semi-conductor devices with at least one particular jump barrier or surface barrier adapted for light emission	H01L27/15, H01L33/00
Organic light emitting devices	H01L 27/32, H01L 51/50
Solid state image amplifiers	H01L 31/14
Lasers	H01S 3/00, H01S 5/00
Pulse generation with electroluminescent elements	H03K 3/00
Electronic gates with electroluminescent elements	H03K 17/78

Special rules of classification

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

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H05B 33/08

Definition statement

Replace: All text in the Definition statement section with the following new text.

Circuits for driving electroluminescent panels.

Limiting references

Replace: All rows in the Limiting references table with the following one row.

Circuit arrangements for operating light emitting diodes	H05B 45/00
--	------------

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

Informative references

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

Control of light sources general	H05B 47/00
Circuit arrangements or apparatus for operating discharge lamps, e.g. fluorescent tubes	H05B 41/00
Electric lighting	F21
Control arrangements or circuits for displays	G09G 3/00
Inorganic light emitting devices [LED]	H01L 33/00
Onorganic light emitting devices [OLED]	H01L 51/00
Laser	H01S 3/00, H01S 5/00
Switching power supplies in general and inverters	H02M
Printed circuits [PCBs]; Details of electric apparatus, e.g. heatsinks	H05K

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Special rules of classification

Replace: All text in the Special rules of classification section with the following new text.

 Control of white light is classified in the colour section H05B 45/20 and subgroups.

H05B 35/00

Informative references

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

Driving Electroluminescent panels	H05B 33/08
Driving LEDs	H05B 33/0803
Controlling of lighting in general	H05B 37/00
Driving Incandescent lamps	H05B 39/00
Driving Fluorescent lamps	H05B 41/00

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

Driving electroluminescent panels	H05B 33/08
Circuit arrangements for operating light emitting diodes [LED]	H05B 45/00
Circuit arrangements for electric light sources in general	H05B 47/00
Circuit arrangements or apparatus for operating incandescent light sources	H05B 39/00
Circuit arrangements or apparatus for igniting or operating discharge lamps, e.g. fluorescent lamps	H05B 41/00

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H05B 39/00

Definition statement

Replace: The statement in the Definition statement section with the following text.

Circuit arrangements for controlling the light intensity of incandescent lamps.

Limiting references

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

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

Informative references

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

Regulating electric variables, e.g. voltage or current	G05F
Incandescent lamps per se	H01K
Switching power supplies and inverters	H02M
Switching in general	H03K

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

H05B 41/00

Definition statement

Replace: The statement in the Definition statement section with the following text.

Circuit arrangements, e.g. drivers, for discharge lamps.

Limiting references

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

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

Informative references

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

Arc lamps with consumable electrodes	H05B 31/00
Welding using accumulated energy	B23K 11/24
Electric lighting	F21
Transformers or chokes for supplying discharge lamps	H01F 38/08
Circuit elements structurally associated with discharge lamps	H01J7/44, H01J19/78
Discharge lamps per se	H01J 61/00 – H01J 65/00
Discharge lasers	H01S 3/00
Pulse technique	H03K
PCBs in general	H05K

Special rules of classification

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

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2. B. DEFINITIONS QUICK FIX

<u>Symbol</u>	Location of	Existing reference	Action; New symbol; New text
	<u>change</u>	symbol or text	
	(e.g., section		
	title)		
H05B 33/0824			Delete the entire definition.
H05B 33/0827			Delete the entire definition.
H05B 33/083			Delete the entire definition.
H05B 33/0842			Delete the entire definition.
H05B 37/00			Delete the entire definition.
H05B 43/00			Delete the entire 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	H05B 33/08	H05B 33/08, H05B 45/00	
D	H05B 33/0803	<administrative 00="" 45="" h05b="" to="" transfer=""></administrative>	
D	H05B 33/0806	<administrative 00="" 45="" h05b="" to="" transfer=""></administrative>	
D	H05B 33/0809	<administrative 37="" 45="" h05b="" to="" transfer=""></administrative>	
D	H05B 33/0812	<administrative 395="" 45="" h05b="" to="" transfer=""></administrative>	
D	H05B 33/0815	<administrative 37="" 45="" h05b="" to="" transfer=""></administrative>	
D	H05B 33/0818	<administrative 37="" 45="" h05b="" to="" transfer=""></administrative>	
D	H05B 33/0821	<administrative 40="" 45="" h05b="" to="" transfer=""></administrative>	
D	H05B 33/0824	<administrative 44="" 45="" h05b="" to="" transfer=""></administrative>	
D	H05B 33/0827	<administrative 45="" 46="" h05b="" to="" transfer=""></administrative>	
D	H05B 33/083	<administrative 45="" 48="" h05b="" to="" transfer=""></administrative>	
D	H05B 33/0842	<administrative 00="" 45="" h05b="" to="" transfer=""></administrative>	
D	H05B 33/0845	<administrative 10="" 45="" h05b="" to="" transfer=""></administrative>	
D	H05B 33/0848	<administrative 14="" 45="" h05b="" to="" transfer=""></administrative>	
D	H05B 33/0851	<administrative 10="" 45="" h05b="" to="" transfer=""></administrative>	
D	H05B 33/0854	<administrative 10="" 45="" h05b="" to="" transfer=""></administrative>	
D	H05B 33/0857	<administrative 20="" 45="" h05b="" to="" transfer=""></administrative>	
D	H05B 33/086	<administrative 20="" 45="" h05b="" to="" transfer=""></administrative>	
D	H05B 33/0863	<administrative 20="" 45="" h05b="" to="" transfer=""></administrative>	
D	H05B 33/0866	<administrative 24="" 45="" h05b="" to="" transfer=""></administrative>	
D	H05B 33/0869	<administrative 22="" 45="" h05b="" to="" transfer=""></administrative>	
D	H05B 33/0872	<administrative 20="" 45="" h05b="" to="" transfer=""></administrative>	
D	H05B 33/0884	<administrative 45="" 50="" h05b="" to="" transfer=""></administrative>	
D	H05B 33/0887	<administrative 45="" 50="" h05b="" to="" transfer=""></administrative>	
D	H05B 33/089	<administrative 45="" 50="" h05b="" to="" transfer=""></administrative>	
D	H05B 33/0893	<administrative 45="" 58="" h05b="" to="" transfer=""></administrative>	
D	H05B 33/0896	<administrative 45="" 60="" h05b="" to="" transfer=""></administrative>	
D	H05B 37/00	<administrative 00="" 47="" h05b="" to="" transfer=""></administrative>	
D	H05B 37/02	<administrative 10="" 47="" h05b="" to="" transfer=""></administrative>	
D	H05B 37/0209	<administrative 10="" 47="" h05b="" to="" transfer=""></administrative>	
D	H05B 37/0218	<administrative 11="" 47="" h05b="" to="" transfer=""></administrative>	
D	H05B 37/0227	<administrative 105="" 47="" h05b="" to="" transfer=""></administrative>	
D	H05B 37/0236	<administrative 12="" 47="" h05b="" to="" transfer=""></administrative>	
D	H05B 37/0245	<administrative 175="" 47="" h05b="" to="" transfer=""></administrative>	
D	H05B 37/0254	<administrative 18="" 47="" h05b="" to="" transfer=""></administrative>	
D	H05B 37/0263	<administrative 185="" 47="" h05b="" to="" transfer=""></administrative>	
D	H05B 37/0272	<administrative 19="" 47="" h05b="" to="" transfer=""></administrative>	
D	H05B 37/0281	<administrative 16="" 47="" h05b="" to="" transfer=""></administrative>	
D	H05B 37/029	<administrative 155="" 47="" h05b="" to="" transfer=""></administrative>	
D	H05B 37/03	<administrative 20="" 47="" h05b="" to="" transfer=""></administrative>	
D	H05B 37/032	<administrative 21="" 47="" h05b="" to="" transfer=""></administrative>	
D	H05B 37/034	<administrative 22="" 47="" h05b="" to="" transfer=""></administrative>	
D	H05B 37/036	<administrative 23="" 47="" h05b="" to="" transfer=""></administrative>	
D	H05B 37/038	<administrative 235="" 47="" h05b="" to="" transfer=""></administrative>	
D	H05B 37/04	<administrative 29="" 47="" h05b="" to="" transfer=""></administrative>	

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Type*	From CPC Symbol (existing)	To CPC Symbol(s)		
	(existing)			
D	H05B 43/00	<administrative 00="" 47="" h05b="" to="" transfer=""></administrative>		
D	H05B 43/02	<administrative 00="" 46="" h05b="" to="" transfer=""></administrative>		
Q	H05B 45/00	H05B 45/00, H05B 45/30, H05B 45/305, H05B 45/31, H05B 45/315,		
		H05B 45/32, H05B 45/325, H05B 45/327, H05B 45/33, H05B 45/335,		
		H05B 45/34, H05B 45/345, H05B 45/347, H05B 45/35, H05B 45/355,		
		H05B 45/357, H05B 45/3574, H05B 45/3575, H05B 45/3577,		
		H05B 45/3578, H05B 45/36, H05B 45/37, H05B 45/3725,		
		H05B 45/375, H05B 45/38, H05B 45/382, H05B 45/385, H05B 45/39,		
		H05B 45/392, H05B 45/395, H05B 45/397		
Q	H05B 45/10	H05B 45/10, H05B 45/12, H05B 45/18		
Q	H05B 45/20	H05B 45/20, H05B 45/28		
Q	H05B 45/37	H05B 45/37, H05B 45/3725, H05B 45/375, H05B 45/38, H05B 45/382,		
		H05B 45/385, H05B 45/39, H05B 45/392		
Q	H05B 45/395	H05B 45/395, H05B 45/397		
Q	H05B 45/40	H05B 45/40, H05B 45/42		
Q	H05B 45/50	H05B 45/50, H05B 45/52, H05B 45/54, H05B 45/56		
Q	H05B 47/00	H05B 47/00, H05B 47/10, H05B 47/105, H05B 47/11, H05B 47/115,		
		H05B 47/12, H05B 47/125, H05B 47/13, H05B 47/135, H05B 47/14,		
		H05B 47/155, H05B 47/16, H05B 47/165, H05B 47/17, H05B 47/175,		
		H05B 47/18, H05B 47/185, H05B 47/19, H05B 47/195, H05B 47/20,		
		H05B 47/21, H05B 47/22, H05B 47/23, H05B 47/235, H05B 47/24,		
		H05B 47/25, H05B 47/26, H05B 47/28, H05B 47/29		
Q	H05B 47/10	H05B 47/10, H05B 47/165, H05B 47/17		
Q	H05B 47/105	H05B 47/105, H05B 47/115, H05B 47/125, H05B 47/13, H05B 47/135,		
		H05B 47/14		
Q	H05B 47/19	H05B 47/19, H05B 47/195		
Q	H05B 47/20	H05B 47/20, H05B 47/24, H05B 47/25, H05B 47/26, H05B 47/28		

^{*} 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:

- Only 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)

HOSB 33/0806	CPC	<u>IPC</u>	Action*
H05B 33/0806 DELETE H05B 33/0809 DELETE H05B 33/0812 DELETE H05B 33/0815 DELETE H05B 33/0818 DELETE H05B 33/0818 DELETE H05B 33/0821 DELETE H05B 33/0821 DELETE H05B 33/0827 DELETE H05B 33/083 DELETE H05B 33/0842 DELETE H05B 33/0842 DELETE H05B 33/0845 DELETE H05B 33/0845 DELETE H05B 33/0851 DELETE H05B 33/0851 DELETE H05B 33/0851 DELETE H05B 33/0857 DELETE H05B 33/0857 DELETE H05B 33/0866 DELETE H05B 33/0866 DELETE H05B 33/0866 DELETE H05B 33/0869 DELETE H05B 33/0887 DELETE H05B 33/0887 DELETE H05B 33/0889 DELETE H05B 33/0899 DELETE H05B 33/0890 DELETE H05B 33/0891 DELETE H05B 33/0891 DELETE H05B 33/0893 DELETE H05B 33/0893 DELETE H05B 33/020 DELETE H05B 37/0218 DELETE H05B 37/0218 DELETE H05B 37/0227 DELETE H05B 37/0245 DELETE H05B 37/0254 DELETE H05B 37/0254 DELETE H05B 37/0260 DELETE H05B 37/0270 DELETE H05B 37/0261 DELETE H05B 37/0271 DELETE H05B 37/029 DELETE H05B 37/029 DELETE H05B 37/029 DELETE H05B 37/030 DELETE H05	H05B 33/0803		DELETE
H05B 33/0812 DELETE H05B 33/0815 DELETE H05B 33/0818 DELETE H05B 33/0821 DELETE H05B 33/0821 DELETE H05B 33/0821 DELETE H05B 33/0824 DELETE H05B 33/0827 DELETE H05B 33/083 DELETE H05B 33/0845 DELETE H05B 33/0845 DELETE H05B 33/0848 DELETE H05B 33/0851 DELETE H05B 33/0851 DELETE H05B 33/0854 DELETE H05B 33/0866 DELETE H05B 33/0866 DELETE H05B 33/0866 DELETE H05B 33/0867 DELETE H05B 33/0869 DELETE H05B 33/0887 DELETE H05B 33/0889 DELETE H05B 33/0889 DELETE H05B 33/0889 DELETE H05B 33/0890 DELETE H05B 33/0200 DELETE H05B 33/0200 DELETE H05B 33/0210 DELETE H05B 33/0310 DELETE H05B 33/0320 DELETE			
H05B 33/0812			
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H05B 33/0824			
H05B 33/0827			
H05B 33/083			
H05B 33/0842			
H05B 33/0842			
H05B 33/0845			
H05B 33/0848			
H05B 33/0851			
H05B 33/0854			
H05B 33/086			
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H05B 37/029 DELETE H05B 37/03 DELETE H05B 37/032 DELETE			
H05B 37/03 DELETE H05B 37/032 DELETE			
H05B 37/032 DELETE			
1103D 37/034 DELETE	H05B 37/034		DELETE
H05B 37/036 DELETE			

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<u>CPC</u>	<u>IPC</u>	Action*
H05B 37/038		DELETE
H05B 37/04		DELETE
H05B 43/00		DELETE
H05B 43/02		DELETE
H05B 45/00	H05B 45/00	NEW
H05B 45/10	H05B 45/10	NEW
H05B 45/12	H05B 45/12	NEW
H05B 45/14	H05B 45/14	NEW
H05B 45/18	H05B 45/18	NEW
H05B 45/20	H05B 45/20	NEW
H05B 45/22	H05B 45/22	NEW
H05B 45/24	H05B 45/24	NEW
H05B 45/28	H05B 45/28	NEW
H05B 45/30	H05B 45/30	NEW
H05B 45/305	H05B 45/305	NEW
H05B 45/31	H05B 45/31	NEW
H05B 45/315	H05B 45/315	NEW
H05B 45/32	H05B 45/32	NEW
H05B 45/325	H05B 45/325	NEW
H05B 45/327	H05B 45/327	NEW
H05B 45/33	H05B 45/33	NEW
H05B 45/335	H05B 45/335	NEW
H05B 45/34	H05B 45/34	NEW
H05B 45/345	H05B 45/345	NEW
H05B 45/347	H05B 45/347	NEW
H05B 45/35	H05B 45/35	NEW
H05B 45/355	H05B 45/355	NEW
H05B 45/357	H05B 45/357	NEW
H05B 45/3574	H05B 45/3574	NEW
H05B 45/3575	H05B 45/3575	NEW
H05B 45/3577	H05B 45/3577	NEW
H05B 45/3578	H05B 45/3578	NEW
H05B 45/36	H05B 45/36	NEW
H05B 45/37	H05B 45/37	NEW
H05B 45/3725	H05B 45/3725	NEW
H05B 45/375	H05B 45/375	NEW
H05B 45/38	H05B 45/38	NEW
H05B 45/382	H05B 45/382	NEW
H05B 45/385	H05B 45/385	NEW
H05B 45/39	H05B 45/39	NEW
H05B 45/392	H05B 45/392	NEW
H05B 45/395	H05B 45/395	NEW
H05B 45/397	H05B 45/397	NEW
H05B 45/40	H05B 45/40	NEW

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CPC	<u>IPC</u>	Action*
770 77 17 17	770777 4744	
H05B 45/42	H05B 45/42	NEW
H05B 45/44	H05B 45/44	NEW
H05B 45/46	H05B 45/46	NEW
H05B 45/48	H05B 45/48	NEW
H05B 45/50	H05B 45/50	NEW
H05B 45/52	H05B 45/52	NEW
H05B 45/54	H05B 45/54	NEW
H05B 45/56	H05B 45/56	NEW
H05B 45/58	H05B 45/58	NEW
H05B 45/60	H05B 45/00	NEW
H05B 46/00	H05B 46/00	NEW
H05B 47/00	H05B 47/00	NEW
H05B 47/10	H05B 47/10	NEW
H05B 47/105	H05B 47/105	NEW
H05B 47/11	H05B 47/11	NEW
H05B 47/115	H05B 47/115	NEW
H05B 47/12	H05B 47/12	NEW
H05B 47/125	H05B 47/125	NEW
H05B 47/13	H05B 47/13	NEW
H05B 47/135	H05B 47/135	NEW
H05B 47/14	H05B 47/14	NEW
H05B 47/155	H05B 47/155	NEW
H05B 47/16	H05B 47/16	NEW
H05B 47/165	H05B 47/165	NEW
H05B 47/17	H05B 47/17	NEW
H05B 47/175	H05B 47/175	NEW
H05B 47/18	H05B 47/18	NEW
H05B 47/185	H05B 47/185	NEW
H05B 47/19	H05B 47/19	NEW
H05B 47/195	H05B 47/195	NEW
H05B 47/20	H05B 47/20	NEW
H05B 47/21	H05B 47/21	NEW
H05B 47/22	H05B 47/21	NEW
H05B 47/23	H05B 47/23	NEW
H05B 47/235	H05B 47/23	NEW
H05B 47/24	H05B 47/24	NEW
H05B 47/25	H05B 47/25	NEW
H05B 47/26	H05B 47/26	NEW
H05B 47/28	H05B 47/28	NEW
H05B 47/29	H05B 47/29	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.
- T 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	Referenced subclass or group to be	Action; New reference symbol; New text
to be changed	<u>changed</u>	
B60Q1/00	H05B 37/00	Replace with H05B 47/00.
G02B26/00	H01S3/10, H05B37/00-H05B43/00	Replace with H01S3/10, H05B39/00 –
		H05B47/00.
G02F1/00	H05B33/08, H05B35/00 – H05B43/00	Replace with H05B33/08, H05B35/00 –
		H05B47/00.
G05D25/00	H05B33/08, H05B35/00 – H05B43/00	Replace with H05B33/08, H05B35/00 –
		H05B47/00.
G08B13/19	H05B37/0227	Replace with H05B47/105.
H01L51/50	H05B33/0896	Replace with H05B45/60.
H02H3/046	H05B37/03	Replace with H05B47/20.
H04N9/3155	H05B37/00, H05B41/00	Replace with H05B35/00 – H05B47/00.

Definitions references impacted by this revision project

Location of reference to be changed	Referenced subclass or group to be changed	Section of definition	Action; New reference symbol; New text
A41D27/085	H05B37/0227	Informative references	Replace with H05B47/105.
A41G1/005	H05B37/0227	Limiting references	Replace with H05B47/105.
A63J5/00	H05B37/02	Informative references	Replace with H05B47/10.
A63J17/00	H05B37/02	Limiting references	Replace with H05B47/10.
B60Q3/16	H05B37/00	Informative references	Replace with H05B47/00.
B60Q3/47	H05B37/00	Informative references	Replace with H05B47/00.
B60Q3/80	H05B37/00	Informative references	Replace with H05B47/00.
B60Q11/00	H05B33/00 - H05B43/00	Informative references	Replace range with H05B47/20.
B61L	H05B37/00	Informative references	Replace with H05B47/00
B61L5/00	H05B37/00	Informative references	Replace with H05B47/00.
F21K5/00	H05B43/02	Informative references	Replace with H05B46/00.
F21K5/023	H05B43/02	References out of a residual place	Replace with H05B46/00.

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Location of reference to be changed	Referenced subclass or group to be changed	Section of definition	Action; New reference symbol; New text
F21K9/00	H05B33/0803	Informative references	Replace with H05B45/00.
F21K9/00	H05B33/0857	Informative references	Replace with H05B45/20.
F21K99/00	H05B37/00	References out of a residual place	Replace with H05B47/00.
F21K99/00	H05B43/00	References out of a residual place	Replace with H05B46/00.
F21V	H05B37/00	Informative references	Replace withH05B47/00.
F21V	H05B43/00	Informative references	Replace with H05B46/00.
F25D27/00	H05B37/00	Informative references	Replace with H05B47/00.
G02B26/00	H01S3/10, H05B37/00- H05B43/00	Limiting References	Replace with H01S3/10, H05B39/00 - H05B47/00.
G01J1/32	H05B37/00	Informative references	Replace with H05B47/00.
G01R	H05B37/03	References out of a residual place	Replace with H05B47/20.
G02F	H05B43/00	Informative references	Replace with H05B47/00.
G03B15/04	H05B43/02	Informative references	Replace with H05B46/00.
G05B15/00	H05B37/02	Informative references	Replace with H05B47/10.
G05D25/00	H05B43/00	Application- oriented references	Replace with H05B46/00.
G08B13/00	H05B37/0227	Informative references	Replace with H05B47/105.
G08B13/19	H05B37/0227	Informative references	Replace with H05B47/105.
G08C	H05B37/0272	Informative references	Replace with H05B47/19.
G08G1/00	H05B37/00	Informative references	Replace with H05B47/00.
G08G1/00	H05B37/00	Relationship	Replace with H05B47/00.
G08G1/095	H05B37/03	Informative references	Replace with H05B47/20.
G08G1/095	H05B37/04	Informative references	Replace with H05B47/29.
G08G1/097	H05B37/03	Informative references	Replace with H05B47/20.
G08G1/097	H05B37/04	Informative references	Replace with H05B47/29.

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Location of reference to be changed	Referenced subclass or group to be changed	Section of definition	Action; New reference symbol; New text
G09G	H05B37/00	Limiting references	Replace with H05B47/00.
G09G3/3406	H05B43/00	Informative references	Replace with H05B47/00.
H01L33/00	H05B33/0803	Informative references	Replace with H05B45/00.
H01L51/50	H05B33/0896	Limiting references	Replace with H05B45/60.
H02J1/00	H05B37/00	Limiting references	Replace with H05B47/00.
H02J9/00	H05B37/00	Informative references	Replace with H05B47/00.
H02J13/00	H05B37/00	Limiting references	Replace with H05B47/00.
H02J13/00	H05B37/0263	Limiting references	Replace with H05B47/185.
H04L12/2803	H05B37/0254	Limiting references	Replace with H05B47/18.

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.