EUROPEAN PATENT OFFICE U.S. PATENT AND TRADEMARK OFFICE

CPC NOTICE OF CHANGES 1526

DATE: JANUARY 1, 2024

PROJECT RP10482

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

Action	<u>Subclass</u>	Group(s)
SCHEME:		
Symbols Deleted:	B61L	3/002, 3/004, 3/006, 3/008
Symbols New:	B61L	15/0058, 15/0062, 15/0092, 15/0094
	B61L	99/002
Titles Changed:	B61L	1/16, 1/18, 1/20
	B61L	3/06,3/125,3/20
	B61L	5/00,5/12,5/14,5/189
	B61L	7/00,7/02
	B61L	9/00
	B61L	13/02
	B61L	15/0045, 15/0063, 15/0072, 15/0081
	B61L	17/00
	B61L	19/00, 19/04
	B61L	21/00,21/04,21/10
	B61L	23/002, 23/08, 23/22, 23/32
	B61L	2205/02,2205/04
	B61L	2207/02
	B61L	2210/04
Warnings Deleted:	B61L	SUBCLASS
Warnings New:	B61L	27/04
	B61L	99/00,99/002
C.1 H.I. M	D(11	2201/00
Guidance Headings New:	B61L	2201/00
DEFINITIONS:		
Definitions New:	B61L	1/16, 1/18, 1/20
Definitions () .	B61L	3/06,3/125
	B61L	5/12,5/14,5/189
	B61L	15/0018, 15/0045, 15/0058, 15/0063,
	2012	15/0072, 15/0081
	B61L	23/002,23/08,23/22
	B61L	99/002
Definitions Modified:	B61L	3/00
	B61L	5/00
	B61L	7/00
	B61L	9/00
	B61L	11/00
	B61L	15/00
	B61L	17/00
	B61L	19/00

DATE: JANUARY 1, 2024

PROJECT RP10482

Action	Subclass	Group(s)
	B61L	21/00
	B61L	27/00

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

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

1. CL	ASSII	FICATION SCHEME CHANGES
	\boxtimes	A. New, Modified or Deleted Group(s)
	\boxtimes	B. New, Modified or Deleted Warning(s)
		C. New, Modified or Deleted Note(s)
	\boxtimes	D. New, Modified or Deleted Guidance Heading(s)
2. DE	FINIT	TIONS
	\boxtimes	A. New or Modified Definitions (Full definition template)
		B. Modified or Deleted Definitions (Definitions Quick Fix)
3.	REV	TSION CONCORDANCE LIST (RCL)
4. 🛛	CHA	ANGES TO THE CPC-TO-IPC CONCORDANCE LIST (CICL)
5.	CHA	ANGES TO THE CROSS-REFERENCE LIST (CRL)

DATE: JANUARY 1, 2024

PROJECT RP10482

1. CLASSIFICATION SCHEME CHANGES

A. New, Modified or Deleted Group(s)

$SUBCLASS\,B61L-GUIDING\,RAILWAY\,TRAFFIC; ENSURING\,THE\,SAFETY\,OF\,RAILWAY\,TRAFFIC\\$

Type*	<u>Symbol</u>	Indent Level Number of dots (e.g. 0, 1, 2)	Title "CPC only" text should normally be enclosed in {curly brackets}**	<u>Transferred to</u> #
M	B61L1/16	1	Devices for counting axles; Devices for counting vehicles	
M	B61L1/18	1	Railway track circuits (railjoints E01B11/00, e.g. insulated railjoints E01B11/54)	
M	B61L1/20	1	Sa fety a rrangements for preventing or indicating malfunction of the device, e.g. by leakage current, by lightning	
D	B61L3/002	1	{Recorders on the vehicle}	<administrative 0094="" b61l15="" to="" transfer=""></administrative>
D	B61L3/004	1	{Memory means reproducing during the running of the vehicle or vehicle train, e.g. smart cards}	<administrative transfer<br="">to B61L15/0092></administrative>
D	B61L3/006	1	{On-board optimisation of vehicle or vehicle train operation (track-side optimisation of operation B61L27/16)}	<administrative transfer<br="">to B61L15/0058></administrative>
D	B61L3/008	1	{On-board target speed calculation or supervision (track-side control of safe travel B61L27/20; speed control circuitry B60L3/08; speed control of electric drives B60L15/20)}	<a dm="" inistrative="" transfer<br="">to B61L15/0062>
M	B61L3/06	2	controlling by electromagnetic or particle radiation, e.g. by light beam	
M	B61L3/125	4	{using short-range radio transmission}	
M	B61L3/20	3	employing different frequencies or coded pulse groups {, e.g. using currents carried by traction current}	
M	B61L5/00	0	Local operating mechanisms for points or track-mounted scotch-blocks; Visible or audible signals; Local operating mechanisms for visible or audible signals (B61L11/00 takes precedence)	
M	B61L5/12	1	Visible signals	
M	B61L5/14	2	Form signals, e.g. semaphore arms	
M	B61L5/189	3	{using flashing light sources}	
M	B61L7/00	0	Remote control of local operating means for points, signals, or track-mounted scotch-blocks (B61L11/00, B61L13/00 take precedence; interlocking a rrangements B61L19/00)	
M	B61L7/02	1	using mechanical transmission, e.g. wire, lever	

DATE: JANUARY 1, 2024

PROJECT RP10482

M	B61L9/00	0	Illumination specially a dapted for points, form signals, or gates	
U	B61L11/00	0	Operation of points from the vehicle or by the passage of the vehicle	
M	B61L13/02	1	using mechanical interaction between vehicle and track	
M	B61L15/0045	1	{Destination indicators, identification panels or distinguishing signs on the vehicles}	
U	B61L15/0054	1	{Train integrity supervision, e.g. end-of-train [EOT] devices}	
N	B61L15/0058	1	{On-board optimisation of vehicle or vehicle train operation}	
N	B61L15/0062	1	{On-board target speed calculation or supervision}	
M	B61L15/0063	1	{Multiple on-board control systems, e.g. "2 out of 3"-systems}	
M	B61L15/0072	1	{On-board train data handling}	
M	B61L15/0081	1	{On-board diagnosis or maintenance}	
U	B61L15/009	1	{On-board display devices}	
N	B61L15/0092	1	{Memory means reproducing during the running of the vehicle or vehicle train, e.g. smart cards}	
N	B61L15/0094	1	{Recorders on the vehicle}	
M	B61L17/00	0	Switching systems for classification yards	
M	B61L19/00	0	Arrangements for interlocking between points and signals by means of a single interlocking device {, e.g. central control}	
M	B61L19/04	2	Details, e.g. hand lever, back-signalling device	
M	B61L21/00	0	Station blocking between signal boxes in one	
1,1	BOILLINGO	Ü	yard	
M	B61L21/04	1	Electrical locking and release of the route; Electrical repeat locks	
M	B61L21/10	1	Arrangements for trains which are closely following one another	
M	B61L23/002	1	{Control or sa fety means for heart-points and crossings of a erial railways, funicular rackrailway}	
M	B61L23/08	1	for controlling traffic in one direction only	
M	B61L23/22	1	for controlling traffic in two directions over the same pair of rails	
M	B61L23/32	3	with provision for the blocking of passing sidings	
U	B61L27/00	0	Central railway traffic control systems; Trackside control; Communication systems specially a dapted therefor	
С	B61L27/04	1	Automatic systems, e.g. controlled by train; Change-over to manual control	B61L27/04, B61L99/002
С	B61L99/00	0	Subject matter not provided for in other groups of this subclass	B61L99/00, B61L99/002

DATE: JANUARY 1, 2024

PROJECT RP10482

N	B61L99/002	1	{Autonomous vehicles, i.e. under distributed traffic control}	
M	B61L2205/02	1	Global system for mobile communication - railways [GSM-R]	
M	B61L2205/04	1	Satellite based navigation systems, e.g. global positioning system [GPS]	
M	B61L2207/02	1	using light-emitting diodes [LEDs]	
M	B61L2210/04	1	Magnetic elevation vehicles [maglev]	

^{*}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 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 finalization 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.

DATE: JANUARY 1, 2024

PROJECT RP10482

B. New, Modified or Deleted Warning notice(s)

$SUBCLASS\,B61L-GUIDING\,RAILWAY\,TRAFFIC; ENSURING\,THE\,SAFETY\,OF\,RAILWAY\,TRAFFIC\\$

Type*	Location	Old Warning notice	New/Modified Warning
D	B61L	In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.	
N	B61L27/04		Group B61L 27/04 is impacted by reclassification into group B61L 99/002. All groups listed in this Warning should be considered in order to perform a complete search.
N	B61L99/00		Group B61L 99/00 is impacted by reclassification into group B61L 99/002. All groups listed in this Warning should be considered in order to perform a complete search.
N	B61L99/002		Group B61L 99/002 is incomplete pending reclassification of documents from groups B61L 27/04 and B61L 99/00. All groups listed in this Warning 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.

DATE: JANUARY 1, 2024

PROJECT RP10482

C. New, Modified or Deleted Guidance Heading(s)

SUBCLASS B61L - GUIDING RAILWAY TRAFFIC; ENSURING THE SAFETY OF RAILWAY TRAFFIC

Type*	<u>Location</u>	Old Guidance Heading	<u>New/Modified Guidance</u> <u>Heading</u>
N	B61L2201/00 – B61L2210/00		Indexing scheme a ssociated with groups B61L1/00 – B61L99/00 relating to control methods, communication or navigation systems for railway traffic, features of light signals or vehicle systems.

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

NOTES:

- The "Location" column requires the symbol AFTER the guidance heading location. No further directions such as "before" or "after" are required.
- In cases where there may be confusion as to whether a new group falls within the scope of a guidance heading, indicate the guidance heading and whether the group does or does not go with the guidance heading. This can be included in the "Location" column. For example, the guidance heading "Compounds containing carbon together with sulfur, selenium or tellurium with or without hydrogen, halogens, oxygen or nitrogen" encompasses groups C07C 301/00 395/00 only. If a new group C07C 398/00 is proposed and is included in the guidance heading scope, indicate this in the "Location" column as follows: 398/00 to be included under the guidance heading: "Compounds containing carbon together with sulfur, selenium or tellurium with or without hydrogen, halogens, oxygen or nitrogen."

DATE: JANUARY 1, 2024

PROJECT RP10482

2. A. DEFINITIONS (new)

B61L 1/16

References

Informative references

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

Counting moving objects in general	G06M
------------------------------------	------

B61L 1/18

References

Application-oriented references

Examples of places where the subject matter of this place is covered when specially adapted, used for a particular purpose, or incorporated in a larger system:

Automatically-operated track circuits specially adapted for	B61L 23/00
section blocking for controlling traffic	

B61L 1/20

Relationships with other classification places

Detectors themselves are classified in B61K9/00, e.g. hot box detectors in B61K 9/04. Any supervision to detect their malfunction is covered by group B61L1/20.

References

Informative references

DATE: JANUARY 1, 2024

PROJECT RP10482

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

Remote indicating means for abnormal operations	G08B 21/00,
conditions	G08B 23/00

B61L 3/06

References

Informative references

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

Using radio waves	B61L 3/12
-------------------	-----------

B61L 3/125

References

Informative references

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

Long-range radio transmission	B61L 15/0027, B61L
	27/70

DATE: JANUARY 1, 2024

PROJECT RP10482

B61L 5/12

References

Informative references

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

Signalling means on the vehicle	B61L 15/00
Signalling means for classification yards, or the like, with multiple indicating means	B61L 17/023
Signalling means for road crossings	B61L 29/24

B61L 5/14

References

Informative references

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

Illumination for points, form signals	B61L 9/00
---------------------------------------	-----------

B61L 5/189

References

Informative references

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

Visible signalling in general using flashing light sources	G08B 5/38
	H01H 61/06, H01H 61/08

DATE: JANUARY 1, 2024

PROJECT RP10482

B61L 15/0018

References

Informative references

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

Line transmission systems	H04B 3/00

B61L 15/0045

References

Informative references

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

Displaying in general	G09F
1 = 1.5 p 1.1. g 1.1. g 5.1.5.5.1	

B61L 15/0058

Special rules of classification

Optimisation of train running is classified under B61L 15/0058 only if links to signalling system, actual position of the train, braking curves, grades of the track, time tables or the like are present in the disclosure. Otherwise, without said links, general optimisation of multi-drive trains is found in B60L 15/32.

DATE: JANUARY 1, 2024

PROJECT RP10482

B61L 15/0063

References

Informative references

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

Trackside multiple control systems	B61L 27/30
------------------------------------	------------

B61L 15/0072

References

Informative references

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

Trackside train data handling	B61L 27/40
-------------------------------	------------

B61L 15/0081

References

Informative references

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

Trackside diagnosis or maintenance	B61L 27/50
------------------------------------	------------

DATE: JANUARY 1, 2024

PROJECT RP10482

B61L 23/002

References

Informative references

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

Points or safety systems for model railways	A63H
Points, crossings or hearts for aerial railway, funicular rack railway	E01B 25/12

B61L 23/08

References

Application-oriented references

Examples of places where the subject matter of this place is covered when specially adapted, used for a particular purpose, or incorporated in a larger system:

Station blocking between signal boxes in one yard	B61L 21/00
---------------------------------------------------	------------

B61L 23/22

References

Application-oriented references

Examples of places where the subject matter of this place is covered when specially adapted, used for a particular purpose, or incorporated in a larger system:

Station blocking between signal boxes in one yard	B61L 21/00
---------------------------------------------------	------------

DATE: JANUARY 1, 2024

PROJECT RP10482

B61L 99/002

Relationships with other classification places

Automatic train operation systems, where driving of the train is taken over by an automatic system but route reservation and/or permission to travel are carried out by a centralised controller, are classified in B61L 27/04. By contrast, fully autonomous vehicles not under the control of a centralised controller are classified in B61L 99/002.

DATE: JANUARY 1, 2024

PROJECT RP10482

2. A. DEFINITIONS (modified)

B61L 3/00

Definition statement

Replace: The existing Definition statement text with the following revised text:

Devices along the track are also understood to be remote control devices of locomotives with portable equipment, e.g. portable control devices for yard locomotives.

References

Delete: The entire Limiting references section.

Informative references

Replace: The existing Informative references table with the following revised table:

Devices along the track influenced by the passage of the rail vehicle which do not influence equipment on the rail vehicle	B61L 1/00
Track circuits details	B61L 1/18
Signals along the track giving instruction to the driver	B61L 5/12 - B61L 5/24
Indicators provided on the vehicle or vehicle train for signalling purposes; On-board control or communication systems	B61L 15/00
Track circuits used for train separation with track blocks	B61L 23/16
Optimisation where the calculations are not performed on board the train	B61L 27/16
Control or regulation of multiple-unit electrically- propelled vehicles	B60L 15/32

DATE: JANUARY 1, 2024

PROJECT RP10482

Arrangements for controlling locomotives from remote points in the train or when operating in	B61C 17/12
multiple units	

Special rules of classification

<u>Delete</u>: The <u>first paragraph</u> of the Special rules of classification text so that it reads as follows:

Intermittent control (B61L 3/02 - B61L 3/14) comprises not only beacons or the like, but also short loops at dedicated locations, whereas continuous control (B61L 3/16) comprises long loops along the whole track.

Radio used for train control, is only classified in B61L 3/125, if short range transmission for a single track using RFID tags, balise transmissions or the like is applied. Long range radio transmission for train control using conductor cables on the track, like wave guides or leaky feeders, can be found under B61L 3/227.

Track circuits for influencing devices on the train are classified under B61L 3/24, when related to transmission of data to trains. If otherwise related to braking or train separation techniques for track blocks, then B61L 23/16 takes precedence. Track circuit details and underlying principles have to be classified under B61L 1/18.

B61L 5/00

Relationships with other classification places

Insert: Two new paragraphs after the existing paragraph so that the Relationships text appears as follows:

Signals along the railway track are classified in this group under B61L 5/18 only, but traffic lights for road traffic are found in G08G 1/095.

All control of switches and signals that are actuated from the vehicle are classified in B61L 11/00 in accordance with the precedence reference.

The indication of the actual switch positions to the train operator should be classified in B61L 9/00.

DATE: JANUARY 1, 2024

PROJECT RP10482

References

Limiting references

Replace: The existing Limiting references table with the following new table:

Operation of points from the vehicle or by the	B61L 11/00
passage of the vehicle	

Informative references

Replace: The existing Informative references table with the following revised table:

Track-mounted scotch-blocks per se	B61K
Derailers and scotch blocks in general	B61K 5/06
Light signals in general (non-railroad)	F21W 2111/00
Road traffic lights	G08G 1/095
Light Emitting Diodes (LED) as such	H05B 33/00
Control of light sources in general	H05B 47/00

Special rules of classification

<u>Delete</u>: The <u>first two paragraphs</u> of the Special rules text <u>and replace "stated" and</u>

"operated" with "state" and "operate" respectively so that the text appears

as follows:

B61L 5/02 should be used for all documents exclusively related to mechanical details of switch machines, even if they do not explicitly state a manual operation and said switch machines could theoretically operate electrically or hydraulically.

DATE: JANUARY 1, 2024

PROJECT RP10482

B61L 7/00

Insert: The following new Relationships section:

Relationships with other classification places

All drives, control and monitoring of railway point locks are classified in B61L 5/10.

All operation of local operating means from the vehicle or by the passage of the vehicle are classified in B61L 5/16.

References

Limiting references

Replace: The existing Limiting references table with the following revised table:

Operation of points from the vehicle or by the passage of the vehicle	B61L 11/00
Operation of signals from the vehicle or by the passage of the vehicle	B61L 13/00
Interlocking arrangements	B61L 19/00

Delete: The entire Special rules of classification section.

B61L 9/00

<u>Insert</u>: The following new Relationships section:

Relationships with other classification places

All railway light signals as such are classified in B61L 5/18.

References

Delete: The entire Limiting references section.

DATE: JANUARY 1, 2024

PROJECT RP10482

Informative references

Replace: The existing Informative references table with the following revised table:

Indicating or recording the setting of track apparatus, e.g. of points, of signals	B61L 25/06
Lighting in general	F21S, F21V

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

B61L 11/00

Definition statement

Replace: "radio based" with "radio-based" so that the text appears as follows:

The local operation of switches by actuation from the vehicle or by the vehicle. It comprises systems like the radio-based train operation (FFB), where field elements are controlled directly by the train via radio. It also comprises local operating mechanism like pedals and the like. It further covers trailable point locks for railway switches.

Relationships with other classification places

Replace: The existing table with the following new text:

All drives, control and monitoring of railway point locks are classified in B61L 5/10.

References

Delete: The entire Limiting references section.

Informative references

Replace: The existing Informative references table with the following revised table:

Non-trailable point locks for railway switches	B61L 5/10
------------------------------------------------	-----------

DATE: JANUARY 1, 2024

PROJECT RP10482

Operation of signals from the vehicle or by the passage of	B61L 13/00
the vehicle	

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

B61L 15/00

Definition statement

Replace: The entire existing Definition text with the following revised text:

This group comprises systems onboard the train for indication, communication and data handling. In particular it comprises:

- Start- and stop- signals provided in the cab for the driver, e.g. including forced emergency braking signals.
- Communication links on the train from one vehicle to the other by cable, radio, optical or other links.
- Communication from the trackside control centre to the train, when transmitted over long distances, including both, speech and control data.
- Indicators in or on the train, which display further information for passengers, like e.g. train number and destination.
- End-of-Train (EOT) detection devices, which ensure the completeness and integrity of the train.
- Multiple systems on board, which include redundant or fault tolerant systems or subsystems, e.g. 2-out-of-3 processors or multiple signalling equipment for migration or multi-national use.
- Train data handling and diagnosis onboard the train, which manage all necessary data on the train to operate the train properly. This includes also operator identification and log-in functionalities for security reasons on the locomotive or train.
- Display devices onboard the train for e.g. giving the train operator in the cab information on safety and train routing issues, speed indications etc.

DATE: JANUARY 1, 2024

PROJECT RP10482

on a screen or giving passengers further information about the actual position of the train, delays, etc. in passenger vehicles.

 Head and end tail lights provided at the front or rear end of the train or vehicle for indicating the moving direction of the train or vehicle.

References

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

Informative references

Replace: The existing Informative references table with the following updated table:

Remote control of locomotives from track-side devices	B61L 3/127
Horns and bells on board the vehicles	B61L 23/00
Multiple systems on track side implementations, which include redundant or fault tolerant systems or subsystems, e.g. 2-out-of-3 processors or multiple signalling equipment for migration or multinational use	B61L 27/30
Dead man devices	B60L 3/02
Control or regulation of multiple-unit electrically-propelled vehicles	B60L 15/32
Head and tail lights for vehicles other than railway vehicles	B60Q 1/26
Arrangements for controlling locomotives from remote points in the train or when operating in multiple units	B61C 17/12
Warning concerning the opening and closing of doors	B61D 19/026
Indicators on platforms in stations for indicating departure times, destinations or the like	G09F

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

DATE: JANUARY 1, 2024

PROJECT RP10482

B61L 17/00

References

Delete: The entire Limiting references section.

Informative references

Replace: The existing Informative references table with the following revised table:

Indicating panels for route settings	B61L 25/06
Marshalling systems	B61B 1/005
Rail brakes	B61K
Details on track brakes	B61K 7/02

Special rules of classification

Delete: The comma after "given" and replace "when ever" with "whenever" in the

second sentence so that the text appears as follows:

Many different techniques are covered here. This classification has to be given whenever the invention is related to activities in yards or maintenance areas. As a consequence, only in very rare cases a document will be given a single classification in the main group only. Typically, also other classifications regarding localisation, serialisation or data handling of trains have to be assigned to documents additionally.

B61L 19/00

Insert: The following new Relationships section:

Relationships with other classification places

This main group predominantly deals with the devices and systems of interlocking equipment. B61L 21/00 relates more to the functional aspects of station blocking like route setting or departure signal authorisations, etc.

References

Delete: The entire Limiting references section.

DATE: JANUARY 1, 2024

PROJECT RP10482

Informative references

Replace: The existing Informative references table with the following revise table:

Railway switch operation and control	B61L 5/02 - B61L 5/10
Railway light signal operation and control	B61L 5/18
Remote control of local operating means for points, signals or track mounted scotch-blocks	B61L 7/00
Systems specially adapted for classification/marshalling yards	B61L 17/00
Blocking arrangements	B61L 21/00, B61L 23/08, B61L 23/22
Electrical route setting and release	B61L 21/04
Transmission of train numbers	B61L 25/04
Indicating panels for route settings	B61L 25/06
Displaying of information in general	G09F

Special rules of classification

Replace: Both existing paragraphs with the following revised text:

For modern central interlockings, which comprise electronic interlocking equipment, additionally B61L 2019/065 "electronic central interlocking" should be assigned to relevant documents.

Synonyms and keywords

<u>Insert</u>: A space between the semicolon and "electronic" in the first row of the

Synonyms and Keywords table.

ESTW	"Elektronisches Stellwerk"; electronic interlocking
------	-----------------------------------------------------

DATE: JANUARY 1, 2024

PROJECT RP10482

B61L 21/00

<u>Insert</u>: The following new Relationships section:

Relationships with other classification places

While this main group deals more with the functional aspects like route setting or departure signal authorisations, etc., B61L 19/00 relates more to the devices and systems of interlocking equipment.

Moving block systems shall be classified under B61L 21/10 and not in B61L 23/18 nor B61L 23/34. The latter subgroup shall only be used when a train is following closely the preceding train by direct distance measurement, e.g. like a joined, virtually coupled train. B61L 23/18 is used when fixed blocks are subdivided or shortened. Instead, when a kind of control center is controlling the follower train even in relative braking distance B61L 21/10 shall be used.

Displays for indication track settings, routes, vehicle positions or numbers are likewise classified under B61L 21/06 and B61L 25/06 since the different information is usually displayed together and because the used techniques are normally the same.

References

Delete: The entire Limiting references section.

Informative references

Replace: The existing Informative references table with the following revised table:

Railway switch operation and control	B61L 5/02 - B61L 5/10
Railway light signal operation and control	B61L 5/18
Systems specially adapted for classification/marshalling yards	B61L 17/00
Interlocking systems and devices	B61L 19/00
Track block length adaption	B61L 23/18
Controlling the distance between trains	B61L 23/34
Transmission of train numbers	B61L 25/04
Displaying track settings	B61L 25/06
Displaying of information in general	G09F

DATE: JANUARY 1, 2024

PROJECT RP10482

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

B61L 27/00

Definition statement

<u>Delete</u>: The phrase "or autonomous vehicles" from the last bullet point appears as follows:

automatic driverless systems for guiding trains through the railway network.

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

Relationships with other classification places

Test and simulation systems for railway signalling equipment or operation are also classified under B61L 27/60 in addition to other groups of B61L when local, portable devices or onboard systems are disclosed without necessarily using a control centre.

"Automatic systems" in B61L 27/04 not only means driverless systems, but also where the operator purely monitors the functioning and health of the system as, for example, on maglev trains. Automatic train operation systems where driving of the train is taken over by an automatic system but route reservation or permission to travel are carried out by a centralised controller are classified in B61L 27/04. By contrast, fully autonomous vehicles not under the control of a centralised controller are classified in B61L 99/002.

References

Informative references

Replace: The existing Informative references table with the following revised table:

On-board optimisation of vehicle or vehicle train operation	B61L 15/0058
On-board target speed calculation or supervision	B61L 15/0062
Multiple systems on board, which include redundant or fault tolerant systems or subsystems, e.g. 2-out-of-3 processors	B61L 15/0063

DATE: JANUARY 1, 2024

PROJECT RP10482

or multiple signalling equipment for migration or multi- national use	
Onboard equipment for collecting and managing vehicle data	B61L 15/0072
Onboard equipment for diagnosis	B61L 15/0081
Localisation means for railway	B61L 25/02

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

DATE: JANUARY 1, 2024

PROJECT RP10482

3. REVISION CONCORDANCE LIST (RCL)

Type*	From CPC Symbol (existing)	To CPC Symbol(s)
D	B61L3/002	<a 0094="" b61l15="" dm="" inistrative="" to="" transfer="">
D	B61L3/004	<a 0092="" b61l15="" dm="" inistrative="" to="" transfer="">
D	B61L3/006	<a 0058="" b61l15="" dm="" inistrative="" to="" transfer="">
D	B61L3/008	<a 0062="" b61l15="" dm="" inistrative="" to="" transfer="">
С	B61L27/04	B61L27/04,B61L99/002
С	B61L99/00	B61L99/00, B61L99/002

^{*} 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 finalization projects.

DATE: JANUARY 1, 2024

PROJECT RP10482

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

<u>CPC</u>	<u>IPC</u>	Action*
B61L 3/002		DELETE
B61L 3/004		DELETE
B61L 3/006		DELETE
B61L 3/008		DELETE
B61L15/0058	B61L15/00	NEW
B61L 15/0062	B61L15/00	NEW
B61L15/0092	B61L15/00	NEW
B61L 15/0094	B61L15/00	NEW
B61L99/002	B61L99/00	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."
- 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.