EUROPEAN PATENT OFFICE U.S. PATENT AND TRADEMARK OFFICE

CPC NOTICE OF CHANGES 1474

DATE: MAY1, 2023

PROJECT RP10484

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

Action	Subclass	<u>Group(s)</u>
SCHEME:		
Symbols New:	E21C	35/282, 35/302
Symbols New.	E21C	2100/00
	E21C	2200/00
Titles Changed:	E21C	25/56, 25/60
Thios Changed.	E21C	35/00, 35/06, 35/12, 35/18, 35/183
Warnings New:	E21C	35/08, 35/10, 35/12, 35/125, 35/14, 35/16,
		35/24, 35/282, 35/302
Guidance Headings Modified:	E21C	41/00
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DEFINITIONS:		
Definitions New:	E21C	25/14, 25/50, 25/64
	E21C	27/14, 27/44
	E21C	35/18, 35/22, 35/24
	E21C	37/22
Definitions Modified:	E21C	SUBCLASS
	E21C	37/00
	E21C	39/00
	E21C	51/00

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

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

- CLASSIFICATION SCHEME CHANGES
 A. New, Modified or Deleted Group(s)
 B. New, Modified or Deleted Warning(s)
 C. New, Modified or Deleted Note(s)
 D. New, Modified or Deleted Guidance Heading(s)
 DEFINITIONS
- - ☐ B. Modified or Deleted Definitions (Definitions Quick Fix)
- 3. ☒ REVISION CONCORDANCE LIST (RCL)
- 4. ☑ CHANGES TO THE CPC-TO-IPC CONCORDANCE LIST (CICL)

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5. \square CHANGES TO THE CROSS-REFERENCE LIST (CRL)

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1. CLASSIFICATION SCHEME CHANGES

A. New, Modified or Deleted Group(s)

SUBCLASS E21C - MINING OR QUARRYING

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	E21C25/56	1	Slitting by cutter cables or cutter chains or by tools drawn along the working face by cables or the like, in each case guided parallel to the face, e.g. by a conveyor or by a guide parallel to a conveyor (pressing the conveyor equipped with tools toward the working face E21C35/14)	
M	E21C25/60	1	Slitting by jets of water or other liquid (picks with arrangement of fluid-spraying nozzles E21C35/187; distribution of spraying fluids in rotating cutter-heads E21C35/23)	
M	E21C35/00	0	Details of, or accessories for, machines for slitting or completely freeing the mineral from the seam, not provided for in groups E21C 25/00 - E21C 33/00, E21C 37/00 or E21C 39/00	
M	E21C35/06	1	Equipment for positioning the whole machine in relation to its sub-structure	
С	E21C35/08	1	Guiding the machine	E21C35/08, E21C35/282, E21C35/302
С	E21C35/10	2	by feelers contacting the working face	E21C35/10, E21C35/282, E21C35/302
С	E21C35/12	2	along a conveyor for the cut material	E21C35/12, E21C35/282, E21C35/302
С	E21C35/125	3	{Means for inclining the conveyor}	E21C35/125, E21C35/282, E21C35/302
С	E21C35/14	3	Equipment for pressing the conveyor towards the working face	E21C35/14, E21C35/282, E21C35/302
С	E21C35/16	2	by making use of the timbering, filling, or other supports	E21C35/16, E21C35/282, E21C35/302
M	E21C35/18	1	Mining picks; Holders therefor (planing knives E21C 27/44)	
М	E21C35/183	2	with inserts or layers of wear-resisting material {(drill bits with wear-resistant parts E21B10/46)}	

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С	E21C35/24	1	Remote control specially adapted for machines for slitting or completely freeing the mineral (control in general G05)	E21C35/24, E21C35/282, E21C35/302
N	E21C35/282	1	{Autonomous machines; Autonomous operations}	
N	E21C35/302	1	{Measuring, signaling or indicating specially adapted for machines for slitting or completely freeing the mineral (measuring or indicating on tunneling machines E21D9/003)}	
U	E21C51/00	0	Apparatus for, or methods of, winning materials from extraterrestrial sources (cosmonautics B64G)	
N	E21C2100/00	0	Modeling, simulating or designing mining operations	
N	E21C2200/00	0	Mining robots	

*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 in formation".

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- 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.

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

SUBCLASS E21C - MINING OR QUARRYING

<u>Type</u> *	Location	Old Warning notice	New/Modified Warning
N	E21C35/08		Group E21C 35/08 is impacted by reclassification into groups E21C 35/302 and E21C 35/282. All groups listed in this Warning should be considered in order to perform a complete search.
N	E21C35/10		Group E21C 35/10 is impacted by reclassification into groups E21C 35/282 and E21C 35/302. All groups listed in this Warning should be considered in order to perform a complete search.
N	E21C35/12		Group E21C 35/12 is impacted by reclassification into groups E21C 35/282 and E21C 35/302. All groups listed in this Warning should be considered in order to perform a complete search.
N	E21C35/125		Group E21C 35/125 is impacted by reclassification into groups E21C 35/282 and E21C 35/302. All groups listed in this Warning should be considered in order to perform a complete search.
N	E21C35/14		Group E21C 35/14 is impacted by reclassification into groups E21C 35/282 and E21C 35/302. All groups listed in this Warning should be considered in order to perform a complete search.
N	E21C35/16		Group E21C 35/16 is impacted by reclassification into groups E21C 35/282 and E21C 35/302. All groups listed in this Warning should be considered in order to perform a complete search.
N	E21C35/24		Group E21C 35/24 is impacted by reclassification into groups E21C 35/282 and E21C 35/302. All groups listed in this Warning should be considered in order to perform a complete search.
N	E21C35/282		Group E21C 35/282 is incomplete pending reclassification of documents from groups E21C 35/08, E21C 35/10, E21C 35/12,

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		E21C 35/125, E21C 35/14, E21C 35/16 and E21C 35/24. All groups listed in this Warning should be considered in order to perform a complete search.
N	E21C35/302	Group E21C 35/302 is incomplete pending reclassification of documents from groups E21C 35/08, E21C 35/10, E21C 35/12, E21C 35/125, E21C 35/14, E21C 35/16 and E21C 35/24. 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.

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

SUBCLASS E21C - MINING OR QUARRYING

<u>Type</u> *	<u>Location</u>	Old Guidance Heading	<u>New/Modified Guidance</u> <u>Heading</u>
M	E21C 41/00 – E21C 51/00	Methods of mining or quarrying; Open-pit mining; Layouts therefor (methods or apparatus for obtaining oil, gas, water, soluble or meltable materials or a slurry of minerals from wells E21B 43/00)	Methods of mining or quarrying; Open-pit mining; Layouts therefor

^{*}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."

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2. A. DEFINITIONS (new)

E21C 25/14

References

Informative References

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

Machines slitting solely by one or more cutter chains moving	E21C 25/50
unidirectionally along jibs with equipment for cleaning the slit	

Special Rules

Looping references between E21C 25/14 and E21C 25/50 have been identified. Until this inconsistency is resolved in IPC, the current classification practice in CPC is as follows: both references are considered informative.

E21C 25/50

References

Informative References

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

Machines slitting solely by one or more cutting rods or cutting	E21C 25/14
drums which rotate, move through the seam, and may or may not	
reciprocate with equipment for cleaning the slit	

Special Rules

Looping references between E21C 25/50 and E21C 25/14 have been identified. Until this inconsistency is resolved in IPC, the current classification practice in CPC is as follows: both references are considered informative.

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E21C 25/64

References

Informative References

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

Hand tools or hand-held power-operated tools specially adapted for	E21C 37/22
dislodging minerals	

Special Rules

Looping references between E21C 25/64 and E21C 37/22 have been identified. Until this inconsistency is resolved in IPC, the current classification practice in CPC is as follows: both references are considered non-limiting.

E21C 27/14

References

Informative References

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

Breaking-down by means inserted in boreholes E21C 37/00

Special Rules

Looping references between E21C 27/14 and E21C 37/00 have been identified. Until this inconsistency is resolved in IPC, the current classification practice in CPC is as follows: the reference to E21C 37/00 is considered informative.

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E21C 27/44

References

Informative References

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

Mining picks	E21C 35/18
I willing picks	E21C 35/16

Special Rules

Looping references between E21C 27/44 and E21C 35/18 have been identified. Until this inconsistency is resolved in IPC, the current classification practice in CPC is as follows: both references are considered non-limiting.

E21C 35/18

References

Residual References

Examples of places in relation to which this place is residual:

Planing knives	E21C 27/44
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Informative References

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

Tools, e.g. having exchangeable cutter bits, for milling stone	B28D 1/186
or stone-like materials not otherwise provided for	

Special Rules

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Looping references between E21C 35/18 and E21C 27/44 have been identified. Until this inconsistency is resolved in IPC, the current classification practice in CPC is as follows: both references are considered non-limiting.

E21C 35/22

References

Limiting references

This place does not cover:

Special rules of classification

Looping references between E21C 35/22 and E21C 35/187 have been identified. Until this inconsistency is resolved in IPC, the current classification practice in CPC is as follows: the reference to E21C 35/187 is considered limiting.

E21C 35/24

References

Informative references:

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

Control in general	G05
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Special rules of classification

Reference G05 is non-limiting in subgroup E21C 35/24. CPC will be corrected once this inconsistency is resolved in IPC.

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E21C 37/22

References

Residual References

Examples of places in relation to which this place is residual:

Slitting machines guided solely by hand and either carried by hand	E21C 25/64
or mounted on supports	

Special Rules

Looping references between E21C 37/22 and E21C 25/64 have been identified. Until this inconsistency is resolved in IPC, the current classification practice in CPC is as follows: both references are considered non-limiting.

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2. A. DEFINITIONS (modified)

E21C

References

Informative references:

Insert: The following new rows to the Informative references table.

Repairing, reconditioning, taking-up, grinding, or milling of road or like surface	E01C
Shafts; Tunnels; Galleries; Large underground chambers	E21D
Safety devices, transport, rescue, ventilation or drainage in or of mines or tunnels	E21F

E21C 37/00

Insert: The following new Special rules of classification section and text.

Special rules of classification

Looping references between E21C 37/00 and E21C 27/14 have been identified. Until this inconsistency is resolved in IPC, the current classification practice in CPC is as follows: the reference to E21C 27/14 is considered limiting.

E21C 39/00

References

Delete: The Limiting references section and table.

Insert: The new Informative references section and table below.

Informative references:

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

Indicating devices for use during driving of tunnels	E21D 9/003

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Rock pressure control devices E21F 17/185	
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E21C 51/00

<u>Insert</u>: The following new Special rules of classification section and text.

Special rules of classification

Looping references between E21C 51/00 and B64G have been identified. Until this inconsistency is resolved in IPC, the current classification practice in CPC is as follows: the reference to B64G is considered informative.

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3. REVISION CONCORDANCE LIST (RCL)

Type*	From CPC Symbol (existing)	To CPC Symbol(s)
С	E21C35/08	E21C35/08, E21C35/282, E21C35/302
С	E21C35/10	E21C35/10, E21C35/282, E21C35/302
С	E21C35/12	E21C35/12, E21C35/282, E21C35/302
С	E21C35/125	E21C35/125, E21C35/282, E21C35/302
С	E21C35/14	E21C35/14, E21C35/282, E21C35/302
С	E21C35/16	E21C35/16, E21C35/282, E21C35/302
С	E21C35/24	E21C35/24, E21C35/282, E21C35/302

^{*} 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.

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

CPC	<u>IPC</u>	Action*
E21C35/282	E21C35/00	NEW
E21C35/302	E21C35/00	NEW
E21C2100/00	CPCONLY	NEW
E21C2200/00	CPCONLY	NEW

*Action column:

- For an (N) or (Q) entry, provide an IPC symbol and complete the Action column with "NEW."
- For an existing CPC main trunk entry or indexing entry where the existing IPC symbol needs to be changed, provide an updated IPC symbol and complete the Action column with "UPDATED."
- 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 not 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.