EUROPEAN PATENT OFFICE
U.S. PATENT AND TRADEMARK OFFICE

CPC NOTICE OF CHANGES 706

DATE: AUGUST 1, 2019

PROJECT RP0345

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

Action	**Subclass**	**Group(s)**
SCHEME:		
Symbols Deleted:	C12Q	2527/10
	C12Q	2535/10
	C12Q	2561/10
Titles Changed:	C12Q	2500/00, 2520/00, 2521/00, 2521/10, 2521/30, 2521/50, 2521/525, 2522/00, 2522/10, 2523/00, 2523/10, 2523/30, 2525/143, 2525/185, 2525/186 2527/00, 2527/125, 2527/143, 2527/146, 2531/10, 2533/10, 2533/101, 2533/107, 2535/00, 2535/139, 2537/137, 2537/149, 2537/155, 2537/161, 2537/163, 2541/10, 2545/10, 2545/114, 2547/10, 2549/10, 2549/126, 2560/00, 2561/00, 2563/00, 2565/10, 2565/20, 2565/30, 2565/40, 2565/501, 2565/543, 2565/60, 2565/627, 2600/00
Indents Changed:	C12Q	2527/101, 2527/107, 2527/109, 2527/113, 2527/119, 2527/125, 2527/127, 2527/137, 2527/143, 2527/146, 2527/149, 2527/15, 2527/153, 2527/156, 2535/101, 2535/107, 2535/113, 2535/119, 2535/122, 2535/125, 2535/131, 2535/137, 2535/138, 2535/139, 2561/101, 2561/107, 2561/108, 2561/109, 2561/113, 2561/119, 2561/12, 2561/125, 2561/127
Notes Deleted:	C12Q	2563/116, 2563/119, 2563/125
DEFINITIONS:		
Definitions New:	C12Q	2521/525, 2525/143, 2525/185, 2525/186, 2527/00, 2533/10, 2533/101, 2533/107, 2535/139, 2537/137, 2537/149, 2537/155, 2537/161, 2537/163, 2545/114, 2549/126, 2563/116, 2563/119, 2563/125, 2565/543, 2565/627

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

1. CLASSIFICATION SCHEME CHANGES

☒ A. New, Modified or Deleted Group(s)

- ☐ B. New, Modified or Deleted Warning(s)
- ☒ C. New, Modified or Deleted Note(s)
- ☐ D. New, Modified or Deleted Guidance Heading(s)

2. DEFINITIONS
   - ☒ A. New or Modified Definitions (Full definition template)
   - ☐ B. Modified or Deleted Definitions (Definitions Quick Fix)
3. ☒ REVISION CONCORDANCE LIST (RCL)
4. ☒ CHANGES TO THE CPC-TO-IPC CONCORDANCE LIST (CICL)
5. ☐ CHANGES TO THE CROSS-REFERENCE LIST (CRL)

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1. CLASSIFICATION SCHEME CHANGES

A. New, Modified or Deleted Group(s)

SUBCLASS C12Q - MEASURING OR TESTING PROCESSES INVOLVING ENZYMES, NUCLEIC ACIDS OR MICROORGANISMS (immunoassay G01N 33/53); COMPOSITIONS OR TEST PAPERS THEREFOR; PROCESSES OF PREPARING SUCH COMPOSITIONS; CONDITION-RESPONSIVE CONTROL IN MICROBIOLOGICAL OR ENZYMOLOGICAL PROCESSES

Type*	**Symbol**	**Indent Level Number of dots (e.g. 0, 1, 2)**	**Title "CPC only" text should normally be enclosed in {curly brackets}****	**Transferred to#**
M	C12Q2500/00	0	Analytical methods involving nucleic acids	
M	C12Q2520/00	0	Reactions involving nucleic acids	
M	C12Q2521/00	0	Reaction characterised by the enzymatic activity	
M	C12Q2521/10	1	Nucleotidyl transfering	
M	C12Q2521/30	1	Phosphoric diester hydrolysing, i.e. nuclease	
M	C12Q2521/50	1	Other enzymatic activities	
M	C12Q2521/525	2	Phosphatase	
M	C12Q2522/00	0	Reaction characterised by the use of non-enzymatic proteins	
M	C12Q2522/10	1	Nucleic acid binding proteins	
M	C12Q2523/00	0	Reactions characterised by treatment of reaction samples	
M	C12Q2523/10	1	Characterised by chemical treatment	
M	C12Q2523/30	1	Characterised by physical treatment	
M	C12Q2525/143	2	incorporating a promoter sequence	
M	C12Q2525/185	2	incorporating bases where the precise position of the bases in the nucleic acid string is important	
M	C12Q2525/186	2	incorporating a non-extendable or blocking moiety	
T	C12Q2527/00	0	Reactions demanding special reaction conditions	
D	C12Q2527/10	1		<Administrative Transfer to C12Q2527/00>
M	C12Q2527/101	1	Temperature	
M	C12Q2527/107	1	Temperature of melting, i.e. Tm	
M	C12Q2527/109	1	Pressure	
M	C12Q2527/113	1	Time	
M	C12Q2527/119	1	pH	

Type*	**Symbol**	**Indent Level Number of dots (e.g. 0, 1, 2)**	**Title "CPC only" text should normally be enclosed in {curly brackets}****	**Transferred to#**
M	C12Q2527/125	1	Specific component of sample, medium or buffer	
M	C12Q2527/127	1	the enzyme inhibitor or activator used	
M	C12Q2527/137	1	Concentration of a component of medium	
M	C12Q2527/143	1	Concentration of primer or probe	
M	C12Q2527/146	1	Concentration of target or template	
M	C12Q2527/149	1	Concentration of an enzyme	
M	C12Q2527/15	1	Gradients	
M	C12Q2527/153	1	Viscosity	
M	C12Q2527/156	1	Permeability	
M	C12Q2531/10	1	the purpose being amplify/increase the copy number of target nucleic acid	
M	C12Q2533/10	1	the purpose being to increase the length of an oligonucleotide strand	
M	C12Q2533/101	2	Primer extension	
M	C12Q2533/107	2	Probe or oligonucleotide ligation	
T	C12Q 2535/00	0	Reactions characterised by the assay type for determining the identity of a nucleotide base or a sequence of oligonucleotides	
D	C12Q2535/10	1		<Administrative Transfer to C12Q2535/00>
M	C12Q2535/101	1	Sanger sequencing method, i.e. oligonucleotide sequencing using primer elongation and dideoxynucleotides as chain terminators	
M	C12Q2535/107	1	Maxam and Gilbert method, i.e. sequential release and detection of nucleotides	
M	C12Q2535/113	1	Cycle sequencing	
M	C12Q2535/119	1	Double strand sequencing	
M	C12Q2535/122	1	Massive parallel sequencing	
M	C12Q2535/125	1	Allele specific primer extension	
M	C12Q2535/131	1	Allele specific probes	
M	C12Q2535/137	1	Amplification Refractory Mutation System [ARMS]	
M	C12Q2535/138	1	Amplified fragment length polymorphism [AFLP]	
M	C12Q2535/139	1	Random amplification polymorphism detection [RAPD]	
M	C12Q2537/137	2	a displacement step	
M	C12Q2537/149	2	Sequential reactions	

Type*	**Symbol**	**Indent Level Number of dots (e.g. 0, 1, 2)**	**Title "CPC only" text should normally be enclosed in {curly brackets}****	**Transferred to#**
M	C12Q2537/155	2	Cyclic reactions	
M	C12Q2537/161	2	A competitive reaction step	
M	C12Q2537/163	2	blocking probe	
M	C12Q2541/10	1	the purpose being the selection or design of target specific nucleic acid binding sequences	
M	C12Q2545/10	1	the purpose being quantitative analysis	
M	C12Q2545/114	2	involving a quantitation step	
M	C12Q2547/10	1	the purpose being preventing contamination	
M	C12Q2549/10	1	the purpose being that of reducing false positive or false negative signals	
M	C12Q2549/126	2	using oligonucleotides as clamps	
M	C12Q2560/00	0	Nucleic acid detection	
T	C12Q2561/00	0	Nucleic acid detection characterised by assay method	
D	C12Q2561/10	1		<Administrative Transfer to C12Q2561/00>
M	C12Q2561/101	1	Taqman	
M	C12Q2561/107	1	Enzyme complementation	
M	C12Q2561/108	1	Hybridisation protection assay [HPA]	
M	C12Q2561/109	1	Invader technology	
M	C12Q2561/113	1	Real time assay	
M	C12Q2561/119	1	Fluorescence polarisation	
M	C12Q2561/12	1	Fluorescence lifetime measurement	
M	C12Q2561/125	1	Ligase Detection Reaction [LDR]	
M	C12Q2561/127	1	Protein truncation assay	
M	C12Q2563/00	0	Nucleic acid detection characterized by the use of physical, structural and functional properties	
M	C12Q2565/10	1	Detection mode being characterised by the assay principle	
M	C12Q2565/20	1	Detection means characterised by being a gene reporter based analysis	
M	C12Q2565/30	1	Detection characterised by liberation or release of label	
M	C12Q2565/40	1	Detection characterised by signal amplification of label	
M	C12Q2565/501	2	being an array of oligonucleotides	
M	C12Q2565/543	2	characterised by the use of two or more capture oligonucleotide primers in concert, e.g. bridge amplification	

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M	C12Q2565/60	1	Detection means characterised by use of a special device	
M	C12Q2565/627	2	being a mass spectrometer	
M	C12Q2600/00	0	Oligonucleotides characterized by their use	

*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 subclasses, 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} are 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 must 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.

C. New, Modified or Deleted Note(s)

SUBCLASS C12Q - MEASURING OR TESTING PROCESSES INVOLVING ENZYMES, NUCLEIC ACIDS OR MICROORGANISMS (immunoassay G01N 33/53); COMPOSITIONS OR TEST PAPERS THEREFOR; PROCESSES OF PREPARING SUCH COMPOSITIONS; CONDITION-RESPONSIVE CONTROL IN MICROBIOLOGICAL OR ENZYMOLOGICAL PROCESSES

Type*	**Location**	**Old Note**	**New/Modified Note**
D	C12Q 2563/116	Not to be used with C12Q 2563/113	
D	C12Q2563/119	Not to be used with code C12Q 2565/531	
D	C12Q2563/125	This code is restricted in use to ENZYMES as a LABEL	

*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.

2. A. DEFINITIONS (new)

C12Q2521/525

Phosphatase

Special rules of classification

When the detection is based on the release of pyrophosphate, classification is made in group C12Q2565/301.

C12Q2525/143

Incorporating a promoter sequence

Special rules of classification

When the promoter-based amplification (e.g. NASBA, 3SR, TAS) is of relevance, classification is made in group C12Q2531/143.

C12Q2525/185

Incorporating base(s) where the precise position of the base(s) in the nucleic acid string is important

Special rules of classification

Classification in this group is not to be used for 3'-end base.

C12Q2525/186

Incorporating a non-extendable or blocking moiety

Special rules of classification

When the incorporation is made in the context of the Sanger sequencing method, i.e. oligonucleotide sequencing using primer elongation and dideoxynucleotides as chain terminators, classification is made in group C12Q2535/101.

C12Q2527/00

Reactions demanding special reaction conditions

Special rules of classification

When the reaction requires the presence of a metal/ion, classification is made in group C12Q2563/137.

C12Q2533/10

The purpose being to increase the length of an oligonucleotide strand ligase detection reaction

Special rules of classification

When the method involves a ligase detection reaction [LDR], classification is made in group C12Q2561/125.

C12Q2533/101

Primer extension

References

Informative references

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

Allele specific primer extension	C12Q2535/125

Characterised by the capture oligonucleotide acting as a primer	C12Q2565/537

C12Q2533/107

Probe or oligonucleotide ligation

Special rules of classification

When the ligation is assessed in the context of a ligase chain reaction or of a ligase detection reaction, classification is made in groups C12Q2531/137 or C12Q2561/125, respectively.

C12Q2535/139

Random amplification polymorphism detection [RAPD]

Special rules of classification

When the reaction is characterized by incorporating arbitrary or random nucleotide sequences, classification is made in group C12Q2525/179.

C12Q2537/137

A displacement step

Special rules of classification

When the method relates to strand displacement amplification [SDA], classification is made in group C12Q2531/119.

C12Q2537/149

Sequential reactions

Special rules of classification

Classification in this group is not to be used for reactions that are implicitly known to be sequential (e.g. amplification reactions).

C12Q2537/155

Cyclic reactions

Special rules of classification

When the reaction is based on linear amplification, i.e. non exponential, on asymmetric PCR, on PCR, on strand displacement amplification, on rolling circle, on inverse PCR, on ligase chain reaction, on promoter based amplification or on replicase based amplification, classification is made in groups C12Q2531/101-C12Q2531/149, respectively.

C12Q2537/161

A competitive reaction step

Special rules of classification

When the reaction step is used in the context of a quantitative measurement with a competitive internal standard/control, classification is made in group C12Q2545/107.

C12Q2537/163

Blocking probe

Special rules of classification

When an enzyme inhibitor or activator is used in the reaction or when a non-extendable or blocking moiety is used in the reaction, classification is made in groups C12Q2527/127 or C12Q2525/186, respectively.

C12Q2545/114

Involving a quantitation step

Special rules of classification

When the reaction is based on the use of an internal standard/control or on the use of a competitive internal standard/control, or finally on the use of an external standard/control, i.e. control reaction is separated from the test/target reaction, then the classification is made in groups C12Q2545/101, C12Q2545/107 or C12Q2545/113, respectively.

C12Q2549/126

Using oligonucleotides as clamps

Special rules of classification

When reactions leading to the incorporation of a peptide nucleic acid are involved, classification is made in group C12Q2525/107.

C12Q2563/116

Electrical properties of nucleic acids, e.g. impedance, conductivity or resistance

Special rules of classification

When the label is electroactive, classification is made in group C12Q2563/113.

C12Q2563/119

The label being proteinic

Special rules of classification

When the capture moiety is a protein for target oligonucleotides, classification is made in group C12Q2565/531.

C12Q2563/125

The label being enzymatic, i.e. proteins, and non proteins, such as nucleic acid with enzymatic activity

Special rules of classification

Classification in this group is to be used when enzymes are used as labels.

C12Q2565/543

Characterised by the use of two or more capture oligonucleotide primers in concert, e.g. bridge amplification

Special rules of classification

When the primers are used in sequential reactions, with the exception of uses for reactions implicitly known to be sequential, e.g. amplification reactions, classification is made in group C12Q2537/149.

C12Q2565/627

Being a mass spectrometer

Special rules of classification

When a mass label is used in nucleic acid detection, classification is made in group C12Q2563/167.

3. REVISION CONCORDANCE LIST (RCL)

Type*	**From CPC Symbol (existing)**	**To CPC Symbol(s)**
D	C12Q2527/10	<administrative transfer to C12Q2527/00>
D	C12Q2535/10	<administrative transfer to C12Q2535/00>
D	C12Q2561/10	<administrative transfer to C12Q2561/00>

* 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.

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

CPC	**IPC**	**Action***
C12Q 2527/10		delete
C12Q2535/10		delete
C12Q2561/10		delete

*Action column:

- For an (N) or (Q) entry, provide an IPC symbol and complete the Action column with "NEW."
- For an existing CPC main trunk entry or indexing entry where the existing IPC symbol needs to be changed, provide an updated IPC symbol and complete the Action column with "UPDATED."
- For a (D) CPC entry or indexing entry complete the Action column with "DELETE." IPC symbol does not need to be included in the IPC column.
- For an (N) 2000 series CPC entry which is positioned within the main trunk scheme (breakdown code) provide an IPC symbol and complete the action column with "NEW".
- 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.