

EUROPEAN PATENT OFFICE
U.S. PATENT AND TRADEMARK OFFICE

CPC NOTICE OF CHANGES 1383

DATE: JANUARY 1, 2023

PROJECT RP11758

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

<u>Action</u>	<u>Subclass</u>	<u>Group(s)</u>
SCHEME:		
Symbols New:	H01S	3/1123
Titles Changed:	H01S	3/08, 3/08018, 3/08022, 3/08031, 3/08036, 3/0804, 3/08045, 3/0805, 3/081, 3/082, 3/106, 3/107, 3/108, 3/109, 3/11, 3/1106, 3/1109, 3/1112, 3/1115, 3/1118, 3/1124, 3/1127, 3/113, 3/115, 3/117, 3/121, 3/123, 3/125, 3/13, 3/136, 3/223
Indents Changed:	H01S	3/1124, 3/1127, 3/113, 3/115, 3/117, 3/121, 3/123, 3/125, 3/127
Warnings New:	H01S	3/11, 3/1123
Warnings Modified:	H01S	SUBCLASS
DEFINITIONS:		
Definitions New:	H01S	3/08022, 3/081
Definitions Modified:	H01S	3/08, 3/082

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

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

1. CLASSIFICATION SCHEME CHANGES

- A. New, Modified or Deleted Group(s)
- B. New, Modified or Deleted Warning(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 H01S - DEVICES USING THE PROCESS OF LIGHT AMPLIFICATION BY STIMULATED EMISSION OF RADIATION [LASER] TO AMPLIFY OR GENERATE LIGHT; DEVICES USING STIMULATED EMISSION OF ELECTROMAGNETIC RADIATION IN WAVE RANGES OTHER THAN OPTICAL

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#
U	H01S 3/00	0	Lasers, i.e. devices using stimulated emission of electromagnetic radiation in the infrared, visible or ultraviolet wave range (semiconductors lasers H01S 5/00)	
U	H01S 3/05	1	Construction or shape of optical resonators; Accommodation of active medium therein; Shape of active medium	
M	H01S 3/08	2	Construction or shape of optical resonators or components thereof	
M	H01S 3/08018	3	Mode suppression	
M	H01S 3/08022	4	Longitudinal modes (mode suppression using a plurality of resonators H01S 3/082)	
M	H01S 3/08031	5	Single-mode emission	
M	H01S 3/08036	6	using intracavity dispersive, polarising or birefringent elements	
M	H01S 3/0804	4	Transverse or lateral modes	
M	H01S 3/08045	5	Single-mode emission	
M	H01S 3/0805	5	by apertures, e.g. pin-holes or knife-edges	
M	H01S 3/081	3	comprising three or more reflectors	
M	H01S 3/082	4	defining a plurality of resonators, e.g. for mode selection or suppression	
U	H01S 3/10	1	Controlling the intensity, frequency, phase, polarisation or direction of the emitted radiation, e.g. switching, gating, modulating or demodulating	
M	H01S 3/106	2	by controlling devices placed within the cavity ({H01S 3/10076,} H01S 3/13 take precedence)	
M	H01S 3/107	3	using electro-optic devices, e.g. exhibiting Pockels or Kerr effect {(H01S 3/1061, H01S 3/1063, H01S 3/1065 take precedence)}	
M	H01S 3/108	3	using non-linear optical devices, e.g. exhibiting Brillouin or Raman scattering	

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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#
			{(mode locking using a non-linear element H01S 3/1112)}	
M	H01S 3/109	4	Frequency multiplication, e.g. harmonic generation	
C	H01S 3/11	2	Mode locking; Q-switching; Other giant-pulse techniques, e.g. cavity dumping	H01S3/11, H01S3/1123
M	H01S 3/1106	3	Mode locking	
M	H01S 3/1109	4	Active mode locking	
M	H01S 3/1112	4	Passive mode locking	
M	H01S 3/1115	5	using intracavity saturable absorbers	
M	H01S 3/1118	6	Semiconductor saturable absorbers, e.g. semiconductor saturable absorber mirrors [SESAMs]; Solid-state saturable absorbers, e.g. carbon nanotube [CNT] based	
U	H01S3/1121	4	{ Harmonically mode locking lasers, e.g. modulation frequency equals multiple integers or a fraction of the resonator roundtrip time }	
N	H01S 3/1123	3	Q-switching	
M	H01S 3/1124	4	{using magneto-optical devices}	
M	H01S 3/1127	4	{using pulse transmission mode [PTM]}	
M	H01S 3/113	4	using intracavity saturable absorbers	
M	H01S 3/115	4	using intracavity electro-optic devices	
M	H01S 3/117	4	using intracavity acousto-optic devices	
M	H01S 3/121	4	using intracavity mechanical devices	
M	H01S 3/123	5	using rotating mirrors	
M	H01S 3/125	5	using rotating prisms	
M	H01S 3/127	4	Plural Q-switches	
M	H01S 3/13	2	Stabilisation of laser output parameters, e.g. frequency or amplitude	
M	H01S 3/136	3	by controlling devices placed within the cavity	
M	H01S 3/223	3	the active gas being polyatomic, i.e. containing two or more atoms (H01S 3/227 takes precedence)	

*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.

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- **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.

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B. New, Modified or Deleted Warning(s)

SUBCLASS H01S - DEVICES USING THE PROCESS OF LIGHT AMPLIFICATION BY STIMULATED EMISSION OF RADIATION [LASER] TO AMPLIFY OR GENERATE LIGHT; DEVICES USING STIMULATED EMISSION OF ELECTROMAGNETIC RADIATION IN WAVE RANGES OTHER THAN OPTICAL

<u>Type*</u>	<u>Location</u>	<u>Old Warning</u>	<u>New Warning</u>
M	H01S	1. The following IPC groups are not in the CPC scheme. The subject matter for these IPC groups is classified in the following CPC groups: H01S 3/098 covered by H01S 3/08018, H01S 3/11 and s.gr. 2. 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.	1. 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	H01S 3/11		Group H01S 3/11 is impacted by reclassification into group H01S 3/1123. Groups H01S 3/11 and H01S 3/1123 should be considered in order to perform a complete search.
N	H01S 3/1123		Group H01S 3/1123 is incomplete pending reclassification of documents from group H01S 3/11. Groups H01S 3/11 and H01S 3/1123 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.

2. A. DEFINITIONS (new)

H01S 3/08022

References

Limiting references

This place does not cover:

Mode suppression using a plurality of resonators	H01S 3/082
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H01S 3/081

References

Informative references

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

Folded-path gas lasers	H01S 3/076
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2. A. DEFINITIONS (modified)

H01S3/08

References

Delete: The Limiting references section and table.

Insert: The following NEW row to the Informative references table.

Informative references

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

Waveguide lasers	H01S 3/063
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H01S3/082

References

Delete: The Limiting references section and table.

Insert: The following NEW Informative references section and table.

Informative references

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

Longitudinal mode control, e.g. specifically multimode	H01S 3/08022
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3. REVISION CONCORDANCE LIST (RCL)

<u>Type*</u>	<u>From CPC Symbol (existing)</u>	<u>To CPC Symbol(s)</u>
C	H01S 3/11	H01S 3/11, H01S 3/1123

* 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)

<u>CPC</u>	<u>IPC</u>	<u>Action*</u>
H01S 3/08018	H01S 3/08018	UPDATE
H01S 3/08022	H01S 3/08022	UPDATE
H01S 3/08027	H01S 3/08022	UPDATE
H01S 3/08031	H01S 3/08031	UPDATE
H01S 3/08036	H01S 3/08036	UPDATE
H01S 3/0804	H01S 3/0804	UPDATE
H01S 3/08045	H01S 3/08045	UPDATE
H01S 3/0805	H01S 3/0805	UPDATE
H01S 3/1106	H01S 3/1106	UPDATE
H01S 3/1109	H01S 3/1109	UPDATE
H01S 3/1112	H01S 3/1112	UPDATE
H01S 3/1115	H01S 3/1115	UPDATE
H01S 3/1118	H01S 3/1118	UPDATE
H01S 3/1121	H01S 3/1106	UPDATE
H01S 3/1123	H01S 3/1123	NEW
H01S 3/1124	H01S 3/1123	UPDATE
H01S 3/1127	H01S 3/1123	UPDATE

* 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.