

U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark Office

CLASSIFICATION ORDER 1844

JUNE 7, 2005  
Project No. E-5281

	<u>Class</u>	<u>Subclass</u>	<u>Art Unit</u>	<u>Ex'r Search Room No.</u>
<b>Abolished:</b>	372	43-50	2881	JEF 03-C01
<b>Established:</b>	372	43.01, 44.01, 44.011, 45.01, 45.011, 45.012, 45.013, 46.01, 46.011-46.016, 49.01, 50.1, 50.11, 50.12, 50.121-50.124, 50.21-50.23	2881	JEF 03-C01

**The following classes are impacted by this project:**

Class (es): 117, 257, 359, and 438

**This order includes the following:**

- A. CLASSIFICATION MANUAL CHANGES
- B. LISTING OF PRINCIPAL SOURCE OF ESTABLISHED  
AND DISPOSITION OF ABOLISHED PAGES
- C. CHANGES TO THE U.S. – I.P.C. CONCORDANCE
- D. DEFINITION CHANGES

U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark Office

CLASSIFICATION ORDER 1844

JUNE 7, 2004  
Project No. E-5281

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Editor: Elma La Touche  
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APRIL 2005

1	SUPERRADIANT LASER	42	..Utilizing color centers
2	FREE ELECTRON LASER	* 43.01	.Semiconductor
3	RAMAN LASER	* 44.01	..Injection
4	LONG WAVELENGTH (E.G., FAR INFRARED)	* 44.011	...Crystal orientation
5	SHORT WAVELENGTH LASER	* 45.01	...Particular confinement layer
6	OPTICAL FIBER LASER	* 45.011	....With strained layer
7	THIN FILM LASER	* 45.012	....With superlattice structure
8	LASER LOGIC SYSTEM	* 45.013	....With saturable absorption layer
9	PARTICULAR BEAM CONTROL DEVICE	* 46.01	...Particular current control structure
10	..Q-switch	* 46.011	....Transverse junction
11	..Absorption type	* 46.012	....Channeled substrate
12	..Electro-optic	* 46.013	....Having oxidized region
13	..Acousto-optic	* 46.014	....Having air gap region
14	..Mechanical	* 46.015	....Having implant region
15	...Rotating mirror	* 46.016	....Disordered region
16	...Rotating prism	* 49.01	...Particular coating on facet
17	..Plural Q-switches	* 50.1	..Monolithic integrated
18	.Mode locking	* 50.11	....With diffraction grating (Bragg reflector)
19	.Mode discrimination		
20	.Tuning	* 50.12	....Laser array
21	.Nonlinear device	* 50.121	....Multiple wavelength emissive
22	..Frequency multiplying (e.g., harmonic generator)	* 50.122	.....Independently addressable
		* 50.123	.....Phase locked
23	.Producing plural wavelength output	* 50.124	....With vertical output (surface emission)
24	.Scanning		
25	.Control of pulse characteristics	* 50.21	...Having photodetection means
26	.Modulation	* 50.22	...Having an amplifier
27	..Polarization	* 50.23	...Having lens
28	..Frequency	51	.Liquid
29.01	.Having particular beam control circuit component	52	..Chelate
		53	..Dye
29.011	..Feedback circuitry	54	..Particular structural features
29.012	..Power supply	55	.Gas
29.013	..Having particular electrode structure	56	..Metal vapor
29.014	..Controlling light intensity	57	..Excimer or exciplex
29.015	..Controlling current or voltage	58	..With means for controlling gas flow
29.016	..Controlling beam phase	59	..Gas maintenance (e.g., purification, replenishment, etc.)
29.02	.Optical output stabilization		
29.021	..Power	60	..Including a specified gas additive
29.022	..Cavity	61	..Discharge tube feature
29.023	..Phase	62	...Segmented
30	..Pulse	63	...Backflow feature
31	..Amplitude	64	..Waveguide
32	..Frequency	65	...Support
33	PARTICULAR OPERATING COMPENSATION MEANS	66	.Active media with particular shape
34	PARTICULAR TEMPERATURE CONTROL	67	..Disc-shaped
35	.Liquid coolant	68	.Plural active media or active media having plural dopants
36	.Heat sink		
37	HAVING AN APPLIED MAGNETIC FIELD	69	PARTICULAR PUMPING MEANS
38.1	PARTICULAR COMPONENT CIRCUITRY	70	.Pumping with optical or radiant energy
38.01	.Having feedback circuitry	71	..End-pumped laser
38.02	.For driving or controlling laser	72	..Pump cavity
38.03	.Switch (e.g., thyratron, etc.)	73	..High-energy particles
38.04	.Power supply	74	..Electron beam
38.05	.Electrode	75	..Semiconductor
38.06	.Optical pumping	76	..Plasma
38.07	.Controlling current or voltage to laser	77	..Exploding or combustible material
38.08	.Having noise suppression circuitry	78	..Heat
38.09	.Having fault protection circuitry	79	..Solar
39	PARTICULAR ACTIVE MEDIA	80	..Excited phosphor
40	.Amorphous (e.g., glass)	81	.Electrical
41	.Insulating crystal	82	..Inductive or capacitive excitation

# Title Change  
\* Newly Established Subclass

@ Indent Change  
& Position Change

APRIL 2005

PARTICULAR PUMPING MEANS

.Electrical

83 ..Transversely excited

84 ...Traveling wave

85 ..Glow discharge

86 ..Having an auxiliary ionization means

87 ..Having particular electrode structure

88 ...Hollow electrode

89 .Chemical

90 .Gas dynamic

91 .With depopulation of lower states

92 PARTICULAR RESONANT CAVITY

93 .Folded cavity

94 ..Having a ring configuration

95 .Unstable resonator

96 .Distributed feedback

97 .Plural cavities

98 .Specified cavity component

99 ..Reflector

100 ..Prism

101 ..Lens or lens system

102 ..Grating

103 ..Window, aperture, and mask

104 ...Aerodynamic window

105 ..Birefringent material

106 ..Polarizer

107 .Mirror support or alignment structure

108 .Specified output coupling device

109 MISCELLANEOUS

\*\*\*\*\*

CROSS-REFERENCE ART COLLECTIONS

\*\*\*\*\*

700 OPTICAL DELAY

701 NOZZLE

702 ISOTOPE

703 OPTICAL ISOLATER

704 SUMMARY REFERENCE

705 NEAT THING

\*\*\*\*\*

FOREIGN ART COLLECTIONS

\*\*\*\*\*

FOR 000 CLASS-RELATED FOREIGN DOCUMENTS

Any foreign patents or non-patent literature from subclasses that have been reclassified have been transferred directly to FOR Collections listed below. These Collections contain ONLY foreign patents or non-patent literature. The parenthetical references in the Collection titles refer to the abolished subclasses from which these Collections were derived.

PARTICULAR BEAM CONTROL DEVICE (372/9)

FOR 100 .Output stabilization (372/29)

FOR 101 WITH PARTICULAR COMPONENT CIRCUITRY (372/38)

\* FOR 102 .Semiconductor (372/43)

\* FOR 103 ..Injection (372/44)

\* FOR 104 ...Particular confinement layer (372/45)

\* FOR 105 ...Particular current control structure (372/46)

\* FOR 106 ....Transverse junction (372/47)

\* FOR 107 ....Channeled substrate (372/48)

# Title Change  
\* Newly Established Subclass

@ Indent Change  
& Position Change

Patent and Trademark Office

CLASSIFICATION ORDER E-5281

June 7, 2005

Project No. 1844

## SOURCE CLASSIFICATION(S) OF PATENTS

## IN NEWLY ESTABLISHED SUBCLASSES REPORT

New Classification	Number Of ORs	Source Classification	Number Of ORs
-----	-----	-----	-----
372/43.01	1	372/45	930
	1	372/48	41
	1	372/50	649
	3	372/47	17
	4	372/45	930
	15	372/46	657
	93	372/43	247
	100	372/43	247
372/44.01	1	372/43	247
	3	372/46	657
	9	372/44	140
	97	372/44	140
372/44.011	1	372/43	247
	1	372/43	247
	1	372/45	930
	28	372/44	140
372/45.01	1	372/50	649
	17	372/46	657
	202	372/45	930
	546	372/45	930

Patent and Trademark Office

CLASSIFICATION ORDER E-5281

June 7, 2005

Project No. 1844

## SOURCE CLASSIFICATION(S) OF PATENTS

## IN NEWLY ESTABLISHED SUBCLASSES REPORT

New Classification	Number Of ORs	Source Classification	Number Of ORs
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372/45.011	3	372/43	247
	8	372/45	930
	43	372/45	930
372/45.012	1	372/43	247
	1	372/46	657
	4	372/46	657
	9	372/45	930
	53	372/45	930
372/45.013	1	372/43	247
	1	372/44	140
	3	372/46	657
	4	372/46	657
	11	372/45	930
	16	372/45	930
372/46.01	1	372/43	247
	1	372/45	930
	1	372/48	41
	110	372/46	657
	378	372/46	657
372/46.011	14	372/47	17
372/46.012	38	372/48	41

Patent and Trademark Office

CLASSIFICATION ORDER E-5281

June 7, 2005

Project No. 1844

## SOURCE CLASSIFICATION(S) OF PATENTS

## IN NEWLY ESTABLISHED SUBCLASSES REPORT

New Classification	Number Of ORs	Source Classification	Number Of ORs
-----	-----	-----	-----
372/46.013	1	372/44	140
	2	372/43	247
	6	372/45	930
372/46.013	8	372/46	657
	14	372/46	657
372/46.014	1	372/43	247
	24	372/46	657
372/46.015	1	372/43	247
	2	372/43	247
	2	372/45	930
	4	372/46	657
	14	372/46	657
372/46.016	1	372/45	930
	1	372/46	657
	19	372/46	657
372/49.01	1	372/48	41
	24	372/49	103
	79	372/49	103
372/50.1	1	372/45	930
	1	372/46	657
	3	372/43	247

Patent and Trademark Office

CLASSIFICATION ORDER E-5281

June 7, 2005

Project No. 1844

## SOURCE CLASSIFICATION(S) OF PATENTS

## IN NEWLY ESTABLISHED SUBCLASSES REPORT

New Classification -----	Number Of ORs -----	Source Classification -----	Number Of ORs -----
	80	372/50	649
	163	372/50	649
372/50.11	1	372/44	140
	1	372/44	140
	2	372/45	930
	3	372/43	247
	3	372/46	657
	3	372/46	657
	4	372/43	247
	15	372/45	930
	17	372/50	649
	48	372/50	649
372/50.12	1	372/44	140
	2	372/43	247
	5	372/46	657
	99	372/50	649
372/50.121	1	372/46	657
	2	372/50	649
	32	372/50	649
372/50.122	2	372/43	247
	2	372/46	657

Patent and Trademark Office

CLASSIFICATION ORDER E-5281

June 7, 2005

Project No. 1844

**SOURCE CLASSIFICATION(S) OF PATENTS**

**IN NEWLY ESTABLISHED SUBCLASSES REPORT**

<b>New Classification</b>	<b>Number Of ORs</b>	<b>Source Classification</b>	<b>Number Of ORs</b>
-----	-----	-----	-----
	2	372/50	649
	10	372/50	649
372/50.123	1	372/44	140
	1	372/46	657
	2	372/45	930
372/50.123	23	372/50	649
372/50.124	1	372/45	930
	1	372/50	649
	3	372/43	247
	13	372/46	657
	23	372/50	649
372/50.21	1	372/43	247
	1	372/45	930
	1	372/46	657
	10	372/43	247
	12	372/50	649
	61	372/50	649
372/50.22	1	372/43	247
	1	372/45	930
	1	372/46	657
	2	372/43	247

Patent and Trademark Office

CLASSIFICATION ORDER E-5281

June 7, 2005

Project No. 1844

## SOURCE CLASSIFICATION(S) OF PATENTS

## IN NEWLY ESTABLISHED SUBCLASSES REPORT

<b>New</b>	<b>Number</b>	<b>Source</b>	<b>Number</b>
<b>Classification</b>	<b>Of ORs</b>	<b>Classification</b>	<b>Of ORs</b>
-----	-----	-----	-----
	2	372/45	930
	3	372/46	657
	12	372/50	649
	36	372/50	649
372/50.23	1	372/45	930
	1	372/50	649
	3	372/46	657
	8	372/43	247
	24	372/50	649
372/58	1	372/50	649
438/758	1	372/46	657

U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark Office

CLASSIFICATION ORDER 1844  
June 7, 2004

Project No. 1844

DISPOSITION CLASSIFICATION(S) OF PATENTS  
FROM ABOLISHED SUBCLASSES REPORT

Source Classification	Number of ORs	New Classification	Number of ORs
-----	-----	-----	-----
372/43	247	372/50.1	3
		372/43.01	93
		372/43.01	100
		372/44.01	1
		372/46.01	1
		372/50.11	3
		372/50.11	4
		372/50.12	2
		372/50.21	1
		372/50.21	10
		372/50.22	1
		372/50.22	2
		372/50.23	8
		372/44.011	1
		372/45.011	3
		372/45.012	1
		372/45.013	1
		372/46.013	2
		372/46.014	1
		372/46.015	1
		372/46.015	2
		372/50.122	2

U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark Office

CLASSIFICATION ORDER 1844  
June 7, 2004

Project No. 1844

DISPOSITION CLASSIFICATION(S) OF PATENTS  
FROM ABOLISHED SUBCLASSES REPORT

Source Classification	Number of ORs	New Classification	Number of ORs
		372/50.124	3
372/44	140	372/44.01	9
		372/44.01	97
		372/50.11	1
		372/50.12	1
		372/44.011	28
		372/45.013	1
		372/46.013	1
		372/50.123	1
372/45	930	372/50.1	1
		372/43.01	1
		372/43.01	4
		372/45.01	202
		372/45.01	546
		372/46.01	1
		372/50.11	2
		372/50.11	15
		372/50.21	1
		372/50.22	1
		372/50.22	2
		372/50.23	1
		372/44.011	1
		372/45.011	8
		372/45.011	43

U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark Office

CLASSIFICATION ORDER 1844  
June 7, 2004

Project No. 1844

DISPOSITION CLASSIFICATION(S) OF PATENTS  
FROM ABOLISHED SUBCLASSES REPORT

Source Classification	Number of ORs	New Classification	Number of ORs
372/45	930	372/45.012	9
		372/45.012	53
		372/45.013	11
		372/45.013	16
		372/46.013	6
		372/46.015	2
		372/46.016	1
		372/50.123	2
		372/50.124	1
372/46	657	372/50.1	1
		372/43.01	15
		372/44.01	3
		372/45.01	17
		372/46.01	110
		372/46.01	378
		372/50.11	3
		372/50.12	5
		372/50.21	1
		372/50.22	1
		372/50.22	3
		372/50.23	3
		372/45.012	1
		372/45.012	4

U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark Office

CLASSIFICATION ORDER 1844  
June 7, 2004

Project No. 1844

DISPOSITION CLASSIFICATION(S) OF PATENTS  
FROM ABOLISHED SUBCLASSES REPORT

Source Classification	Number of ORs	New Classification	Number of ORs
		372/45.013	3
		372/45.013	4
		372/46.013	8
		372/46.013	14
		372/46.014	24
		372/46.015	4
		372/46.015	14
		372/46.016	1
		372/46.016	19
		372/50.121	1
		372/50.122	2
		372/50.123	1
		372/50.124	13
		438/758	1
372/47	17	372/43.01	3
		372/46.011	14
372/48	41	372/43.01	1
		372/46.01	1
		372/49.01	1
		372/46.012	38
372/49	103	372/49.01	24
		372/49.01	79
372/50	649	372/58	1

U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark Office

CLASSIFICATION ORDER 1844  
June 7, 2004

Project No. 1844

DISPOSITION CLASSIFICATION(S) OF PATENTS  
FROM ABOLISHED SUBCLASSES REPORT

Source Classification	Number of ORs	New Classification	Number of ORs
372/50	649	372/50.1	80
		372/50.1	163
		372/43.01	1
		372/45.01	1
		372/50.11	17
		372/50.11	48
		372/50.12	99
		372/50.21	12
		372/50.21	61
		372/50.22	12
		372/50.22	36
		372/50.23	1
		372/50.23	24
		372/50.121	2
		372/50.121	32
		372/50.122	2
		372/50.122	10
		372/50.123	23
		372/50.124	1
		372/50.124	23

U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark Office

CLASSIFICATION ORDER 1844  
June 7, 2004

Project No. 1844

DISPOSITION CLASSIFICATION(S) OF PATENTS  
FROM ABOLISHED SUBCLASSES REPORT

Source Classification	Number of ORs	New Classification	Number of ORs
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CLASSIFICATION ORDER 1844

APRIL 5, 2005  
 Project No. E-5281

**C. CHANGES TO THE U.S. - I.P.C. CONCORDANCE**

<u>Class</u>	<u>Subclass</u>	<u>Subclass</u>	<u>Notation</u>	<u>Class</u>	<u>Subclass</u>	<u>Subclass</u>	<u>Notation</u>
					46.016	H01S	5/00 3/19
372	43.01	H01S	5/00 3/04 3/18		49.01	H01S	5/00 3/19
	44.01	H01S	5/00		50.1	H01S	5/00 3/19
	44.011	H01S	5/00		50.11	H01S	5/00 3/19
	45.01	H01S	5/00 5/20 5/23 5/323		50.12	H01S	5/00 3/19
	45.011	H01S	5/00 3/19		50.121	H01S	5/00 3/19
	45.012	H01S	5/00 3/19		50.122	H01S	5/00 3/19
	45.013	H01S	5/00 3/19		50.123	H01S	5/00 3/19
	45.014	H01S	5/00 3/19		50.124	H01S	5/00 3/19
	46.01	H01S	5/00 3/19		50.21	H01S	5/00 3/19
	46.011	H01S	5/00 3/19		50.22	H01S	5/00 3/19
	46.012	H01S	5/00 3/19		50.23	H01S	5/00 3/19
	46.013	H01S	5/00 3/19				
	46.014	H01S	5/00 3/19				
	46.015	H01S	5/00 3/19				

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D. CHANGES TO THE DEFINITIONS (Project No. E-5281)

CLASS 117 – SINGLE-CRYSTAL, ORIENTED-CRYSTAL, AND EPITAXY GROWTH PROCESSES; NON-COATING APPARATUS THEREFOR

Definitions Modified (Place modifications in numerical sequence, where applicable):

Class Definition: In Section IV, References to Other Classes:

Delete:

The entire search reference to Class 372.

Insert:

372, Coherent Light Generators, appropriate subclasses for art named devices (e.g., lasers), especially subclasses 43.01+ for semiconductor lasers. (B., Selected Notes to Article, Material, Composition, Device, and Product Classes.)

D. CHANGES TO THE DEFINITIONS (Project No. E-5281)

CLASS 257 – ACTIVE SOLID-STATE DEVICES (E.G., TRANSISTORS, SOLID-STATE DIODES)

Definitions Modified (Place modifications in numerical sequence, where applicable):

Subclass 9: Under See or Search Class:

Delete:

The entire search reference to Class 372.

Insert:

372, Coherent Light Generators, subclasses 43.01+ for semiconductor lasers which may contain thin layer devices of this type for producing coherent light.

Subclass 13: Under See or Search Class:

Delete:

The entire search reference to Class 372.

Insert:

372, Coherent Light Generators, subclasses 43.01+ for coherent semiconductor light generators.

Subclass 183: Under See or Search Class:

Delete:

The entire search reference to Class 372.

Insert:

372, Coherent Light Generators, subclasses 43 through 50 for semiconductor lasers which may contain heterojunctions.

D. CHANGES TO THE DEFINITIONS (Project No. E-5281)

CLASS 359 – OPTICAL: SYSTEMS AND ELEMENTS

Definitions Modified (Place modifications in numerical sequence, where applicable):

Subclass 344: Under See or Search Class:

Delete:

The entire search reference to Class 372.

Insert:

372, Coherent Light Generators, subclasses 43.01+ for a semiconductor active medium which is not used for amplification of a light beam input.

D. CHANGES TO THE DEFINITIONS (Project No. E-5281)

CLASS 372 – COHERENT LIGHT GENERATORS

Definitions Abolished

Subclasses

43 – 50

DEFINITIONS ESTABLISHED (Place established subclasses in numerical sequence.):

**43.01 Semiconductor:**

Subject matter under subclass 39 wherein the active media of the coherent light generator or laser is a semiconductor.

**44.01 Injection:**

Subject matter under subclass 43.01 wherein the semiconductor includes a p-n junction which converts forward-bias electrical input directly into coherent optical output power via a process of stimulating emission in the region near the junction.

SEARCH CLASS:

257, Active Solid-State Devices (e.g., Transistors, Solid-State Diodes), subclass 13, 79 through 103, and 918 for incoherent light emitting injection luminescent devices, and subclasses 80 through 85 for semiconductor light emitting sources combined with semiconductor light responsive devices.

438, Semiconductor Device Manufacturing: Process, subclasses 22+ for methods of making radiation emissive devices of the semiconductor barrier layer type.

**44.011 Crystal orientation:**

Subject matter under subclass 44.01 wherein the semiconductor includes a layer that has a predetermined angle with respect to an edge or a facet at which a crystal is sliced.

**45.01 Particular confinement layer:**

Subject matter under subclass 44.01 wherein the semiconductor includes a layer specifically designed to hold carrier and/or radiation within a boundary.

**45.011 With strained layer:**

Subject matter under subclass 45.01 wherein the layer has a lattice constant different from that of the semiconductor substrate.

**45.012 With superlattice structure:**

Subject matter under subclass 45.01 wherein the layer consists of a series of alternating epitaxial layers of two types of material, each layer having a thickness below a critical thickness.

## SEARCH CLASS:

257, Active Solid-State Devices (e.g., Transistor, Solid-State Diodes), subclass 15+ for Quantum well superlattice.

**45.013 With saturable absorption layer:**

Subject matter under subclass 45.01 wherein the layer has an energy bandgap less than that of the semiconductor.

**46.01 Particular current control structure:**

Subject matter under subclass 44.01 wherein the p-n junction of the semiconductor is specifically designed to control a current flow in an active region.

**46.011 Transverse junction:**

Subject matter under subclass 46.01 wherein the p.n junction is set across the layer of the active region.

**46.012 Channeled substrate:**

Subject matter under subclass 46.01 wherein the substrate of the semiconductor is cut in grooves.

**46.013 Having oxidized region:**

Subject matter under subclass 46.01 wherein the particular current control structure includes an area that is oxidized.

(1) Note: An area that is oxidized when it is combined with oxygen or it is changed from a lower to a higher positive valence.

**46.014 Having air gap region:**

Subject matter under subclass 46.01 wherein the p-n junction structure includes a space between layers.

**46.015 Having implant region:**

Subject matter under subclass 46.01 wherein the p-n junction structure includes a layer is created by implantation of ions.

**46.016 Disordered region:**

Subject matter under subclass 46.01 wherein the p-n junction include layers that are structured in different orders or positions.

**49.01 Particular coating on facet:**

Subject matter under subclass 44.01 wherein the semiconductor has a specified layer covered on at least one facet.

**50.1 Monolithic integrated:**

Subject matter under subclass 44.01 wherein electrical elements or circuits formed within a semiconductor substrate.

**50.11 With diffraction grating (Bragg reflector):**

Subject matter under subclass 50.1 wherein the semiconductor includes a series of very fine, closely spaced parallel slits, or of very narrow, parallel reflecting surfaces to produce a succession of spectra when light is incident thereon at a specific angle.

## SEARCH CLASS:

359, Optic Systems and Elements, subclass 563 for diffraction grating.

385, Optical Waveguides, subclass 10 for electro-optic diffraction grating

**50.12 Laser array:**

Subject matter under subclass 50.1 including a group of many similar, basic, complex, or integrated devices without separate enclosures.

**50.121 Multiple wavelength emissive:**

Subject matter under subclass 50.12 wherein a light output of the laser array has a plurality of discrete wavelengths.

**50.122 Independently addressable**

Subject matter under subclass 50.12, wherein the integrated devices of the laser array are separately controlled.

**50.123 Phase locked:**

Subject matter under subclass 50.12, wherein a plurality of active regions of the laser array are sufficiently close to each other that light from each active region is coupled to the light from the adjacent active region.

**50.124 With vertical output (surface emission):**

Subject matter under subclass 50.1 wherein a light output of the laser array is perpendicular to a surface of the semiconductor.

**50.21 Having photodetection means:**

Subject matter under subclass 50.1 including a device for monitoring a light emitted from the semiconductor laser.

**50.22 Having an amplifier:**

Subject matter under subclass 50.1 wherein the semiconductor device includes a device that produces as an output an enlarged reproduction of the essential features of its inputs.

## SEARCH CLASS:

359, Optic: Systems and Elements, subclass 333+ for optical amplifier.

**50.23 Having lens:**

Subject matter under subclass 50.1 wherein the semiconductor device includes an optical device made of glass or a piece of transparent material which focuses light to form an image.

## SEARCH CLASS:

359, Optic: Systems and Elements, subclass 362+ for compound lens system.

## FOREIGN ART COLLECTIONS

The definitions below correspond to abolished subclasses from which these collections were formed. See the Foreign Art Collection schedule of this class for specific correspondences. [Note: The titles and definitions for indented art collections include all the details of the one(s) that are hierarchically superior.]

**FOR 102 Semiconductor:**

This subclass is indented under subclass 39. Foreign art collection wherein the active media is a semiconductor.

- FOR 103 Injection:**
- This subclass is indented under subclass 43. Foreign art collection wherein the laser is a p.n junction semiconductor device which converts forward-bias electrical input directly into coherent optical output power via a process of stimulated emission in the region near the junction.
- FOR 104 Particular confinement layer:**
- This subclass is indented under subclass 44. Foreign art collection wherein there is present a layer specifically designed to provide for carrier and/ or radiation confinement.
- FOR 105 Particular current control structure**
- This subclass is indented under subclass 44. Foreign art collection wherein there is a means which is specifically designed to provide for control of the current flow in the area of the active region.
- FOR 106 Transverse junction:**
- This subclass is indented under subclass 46. Foreign art collection wherein the p.n junction is transverse to the active layer.
- FOR 107 Channeled substrate**
- This subclass is indented under subclass 46. Foreign art collection wherein the substrate has a channel in the substrate region adjacent the active region.
- FOR 108 Particular coating on facet:**
- This subclass is indented under subclass 44. Foreign art collection having a specified coating on at least one facet.
- FOR 109 Monolithic integrated:**
- This subclass is indented under subclass 44. Foreign art collection wherein the laser is monolithically integrated with another laser or with other semiconductor devices which form an integral part of the laser.

D. CHANGES TO THE DEFINITIONS (Project No. E-5281)

CLASS 438 – SEMICONDUCTOR DEVICE MANUFACTURING: PROCESS

Definitions Modified (Place modifications in numerical sequence, where applicable):

Subclass 22: Under See or Search Class:

Delete:

The entire search reference to Class 372.

Insert:

372, Coherent Light Generators, for coherent light emissive devices, in particular subclasses 43.01+ for a semiconductive laser device and subclass 75 for semiconductor optical laser pump devices.

Subclass 24: Under See or Search Class:

Delete:

The entire search reference to Class 372.

Insert:

372, Coherent Light Generators, for coherent light emissive devices, in particular subclasses 43.01+ for a semiconductive laser device and subclass 75 for semiconductor optical laser pump devices.