EUROPEAN PATENT OFFICE
U.S. PATENT AND TRADEMARK OFFICE

CPC NOTICE OF CHANGES 1412

DATE: FEBRUARY 1, 2023

PROJECT RP11761

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

Action	**Subclass**	**Group(s)**
SCHEME:		
Symbols Deleted:	H01L	27/16, 27/18, 27/20, 27/26, 27/265
	H01L	35/00, 35/02, 35/04, 35/06, 35/08, 35/10, 35/12, 35/14, 35/16, 35/18, 35/20, 35/22, 35/225, 35/24, 35/26, 35/28, 35/30, 35/32, 35/325, 35/34
	H01L	37/00, 37/02, 37/025, 37/04
	H01L	39/00, 39/005, 39/02, 39/025, 39/04, 39/045, 39/06, 39/08, 39/10, 39/12, 39/121, 39/123, 39/125, 39/126, 39/128, 39/14, 39/141, 39/143, 39/145, 39/146, 39/148, 39/16, 39/18, 39/20, 39/22, 39/221, 39/223, 39/225, 39/226, 39/228, 39/24, 39/2403, 39/2406, 39/2409, 39/2412, 39/2416, 39/2419, 39/2422, 39/2425, 39/2429, 39/2432, 39/2435, 39/2438, 39/2441, 39/2445, 39/2448, 39/2451, 39/2454, 39/2458, 39/2461, 39/2464, 39/2467, 39/247, 39/2474, 39/2477, 39/248, 39/2483, 39/2487, 39/249, 39/2493, 39/2496
	H01L	41/00, 41/02, 41/04, 41/042, 41/044, 41/047, 41/0471, 41/0472, 41/0474, 41/0475, 41/0477, 41/0478, 41/053, 41/0533, 41/0536, 41/06, 41/08, 41/0805, 41/081, 41/0815, 41/082, 41/0825, 41/083, 41/0831, 41/0833, 41/0835, 41/0836, 41/0838, 41/087, 41/09, 41/0906, 41/0913, 41/092, 41/0926, 41/0933, 41/094, 41/0946, 41/0953, 41/096, 41/0966, 41/0973, 41/098, 41/0986, 41/0993, 41/107, 41/113, 41/1132, 41/1134, 41/1136, 41/1138, 41/12, 41/125, 41/16, 41/18, 41/183, 41/187, 41/1871, 41/1873, 41/1875, 41/1876, 41/1878, 41/193, 41/20, 41/22, 41/23, 41/25, 41/253, 41/257, 41/27, 41/273, 41/277, 41/29, 41/293, 41/297, 41/31, 41/311, 41/312, 41/313, 41/314, 41/316, 41/317, 41/318, 41/319, 41/33, 41/331, 41/332, 41/333, 41/335, 41/337, 41/338, 41/339, 41/35, 41/37, 41/39, 41/41, 41/43, 41/45, 41/47

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Action	Subclass	Group(s)
	H01L	43/00, 43/02, 43/04, 43/06, 43/065, 43/08, 43/10, 43/12, 43/14
	H01L	45/00, 45/005, 45/02, 45/04, 45/06, 45/065, 45/08, 45/085, 45/10, 45/12, 45/1206, 45/1213, 45/122, 45/1226, 45/1233, 45/124, 45/1246, 45/1253, 45/126, 45/1266, 45/1273, 45/128, 45/1286, 45/1293, 45/14, 45/141, 45/142, 45/143, 45/144, 45/145, 45/146, 45/147, 45/148, 45/149, 45/16, 45/1608, 45/1616, 45/1625, 45/1633, 45/1641, 45/165, 45/1658, 45/1666, 45/1675, 45/1683, 45/1691
	H01L	47/00, 47/005, 47/02, 47/023, 47/026
	H01L	49/00, 49/003, 49/006, 49/02
Symbols New:	H10N	SUBCLASS
	H10N	10/00, 10/01, 10/10, 10/13, 10/17, 10/80, 10/81, 10/813, 10/817, 10/82, 10/85, 10/851, 10/852, 10/853, 10/854, 10/855, 10/8552, 10/8556, 10/856, 10/857
	H10N	15/00, 15/10, 15/15, 15/20
	H10N	19/00, 19/101
	H10N	30/00, 30/01, 30/02, 30/03, 30/04, 30/045, 30/05, 30/053, 30/057, 30/06, 30/063, 30/067, 30/07, 30/071, 30/072, 30/073, 30/074, 30/076, 30/077, 30/078, 30/079, 30/08, 30/081, 30/082, 30/084, 30/085, 30/086, 30/088, 30/089, 30/09, 30/092, 30/093, 30/095, 30/097, 30/098, 30/1051, 30/10513, 30/10516, 30/1061, 30/1071, 30/20, 30/202, 30/2023, 30/2027, 30/204, 30/2041, 30/2042, 30/2043, 30/2044, 30/2045, 30/2046, 30/2047, 30/2048, 30/206, 30/208, 30/30, 30/302, 30/304, 30/306, 30/308, 30/40, 30/50, 30/501, 30/503, 30/505, 30/506, 30/508, 30/60, 30/80, 30/802, 30/804, 30/85, 30/852, 30/853, 30/8536, 30/8542, 30/8548, 30/8554, 30/8561, 30/857, 30/87, 30/871, 30/872, 30/874, 30/875, 30/877, 30/878, 30/88, 30/883, 30/886
	H10N	35/00, 35/01, 35/101, 35/80, 35/85
	H10N	39/00
	H10N	50/00, 50/01, 50/10, 50/20, 50/80, 50/85
	H10N	52/00, 52/01, 52/101, 52/80, 52/85
	H10N	59/00

Action	Subclass	Group(s)
	H10N	60/00, 60/01, 60/0128, 60/0156, 60/0184, 60/0212, 60/0241, 60/0268, 60/0296, 60/0324, 60/0352, 60/0381, 60/0408, 60/0436, 60/0464, 60/0492, 60/0521, 60/0548, 60/0576, 60/0604, 60/0632, 60/0661, 60/0688, 60/0716, 60/0744, 60/0772, 60/0801, 60/0828, 60/0856, 60/0884, 60/0912, 60/0941, 60/10, 60/11, 60/12, 60/124, 60/126, 60/128, 60/20, 60/202, 60/203, 60/205, 60/207, 60/208, 60/30, 60/35, 60/355, 60/80, 60/805, 60/81, 60/815, 60/82, 60/83, 60/84, 60/85, 60/851, 60/853, 60/855, 60/857, 60/858, 60/99
	H10N	69/00
	H10N	70/00, 70/011, 70/021, 70/023, 70/026, 70/028, 70/041, 70/043, 70/046, 70/061, 70/063, 70/066, 70/068, 70/10, 70/151, 70/20, 70/231, 70/235, 70/24, 70/245, 70/25, 70/253, 70/257, 70/801, 70/821, 70/823, 70/826, 70/8265, 70/828, 70/841, 70/8413, 70/8416, 70/8418, 70/861, 70/8613, 70/8616, 70/881, 70/882, 70/8822, 70/8825, 70/8828, 70/883, 70/8833, 70/8836, 70/884, 70/8845
	H10N	79/00
	H10N	80/00, 80/01, 80/10, 80/103, 80/107
	H10N	89/00, 89/02
	H10N	97/00
	H10N	99/00, 99/03, 99/05
Warnings Deleted:	H01L	41/00
Warnings New:	H10N	10/855,10/8556
	H10N	19/00
	H10N	30/00, 30/80, 30/85
	H10N	35/00, 35/80, 35/85
	H10N	39/00
	H10N	50/00, 50/20, 50/85
	H10N	52/85
	H10N	59/00
	H10N	69/00
	H10N	79/00
	H10N	89/00
Notes Deleted:	H01L	39/00
	H01L	41/293, 41/297
Guidance Headings New:	H10N	10/00
	H10N	30/00
	H10N	50/00
	H10N	60/00

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Action	Subclass	Group(s)
	H10N	70/00
DEFINITIONS:		
Definitions Deleted: (no frozen (F) symbol definitions should be deleted)	H01L	27/16, 27/18, 27/20, 27/26
	H01L	35/00, 35/04, 35/06, 35/08, 35/10, 35/12, 35/16, 35/18, 35/20, 35/22, 35/24, 35/26, 35/30, 35/32, 35/325, 35/34
	H01L	37/00, 37/02, 37/025, 37/04
	H01L	39/00, 39/02, 39/10, 39/12, 39/128, 39/16, 39/20, 39/2403, 39/2451, 39/2477, 39/248
	H01L	41/00, 41/04, 41/06, 41/16, 41/18, 41/183, 41/20, 41/22, 41/23, 41/27, 41/29, 41/293, 41/297, 41/31, 41/311, 41/39, 41/47
	H01L	43/00, 43/02, 43/10
	H01L	45/00, 45/04
	H01L	47/00
	H01L	49/00

The following subclasses/groups are also impacted by this Notice of Changes (indicate subclasses/groups outside of the project scope, such as those listed in the CRL):
A45D, A61B, A61H, B06B, B22F, B23Q, B25J, B60C, B60H, B81B, B81C, C01G, C04B, C09K, D06F, E05B, F01N, F02D, F02M, F03G, F16F, F16K, F23Q, F24F, F25B, F28D, G01C, G01H, G01J, G01K, G01L, G01N, G01R, G04C, G06F, G06N, G08G, G09G, G10K, G11B, G11C, G21D, G21H, H01B, H01C, H01F, H01G, H01H, H01J, H01L, H01M, H02H, H02M, H02N, H02S, H03B, H03F, H03H, H04N, H04R, H05K

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)

1. CLASSIFICATION SCHEME CHANGES

A. <u>New, Modified or Deleted Group(s)</u>

SUBCLASS H01L - SEMICONDUCTOR DEVICES; ELECTRIC SOLID STATE DEVICES NOT OTHERWISE PROVIDED FOR

<u>Type*</u>	<u>Symbol</u>	<u>Indent Level Number of dots (e.g. 0, 1, 2)</u>	<u>Title</u> "CPC only" text should normally be enclosed in {curly brackets}**	<u>Transferred to</u>#
D	H01L27/16	1	including thermoelectric components with or without a junction of dissimilar materials; including thermomagnetic components (using the Peltier effect only for cooling of semiconductor or other solid state devices H01L 23/38)	<administrative transfer to H10N19/00>
D	H01L27/18	1	including components exhibiting superconductivity	<administrative transfer to H10N69/00>
D	H01L27/20	1	including piezo-electric components; including electrostrictive components; including magnetostrictive components	<administrative transfer to H10N39/00>
D	H01L27/26	1	including bulk negative resistance effect components	<administrative transfer to H10N89/00>
D	H01L27/265	2	{Gunn effect devices}	<administrative transfer to H10N89/02>
D	H01L35/00	0	**Thermoelectric devices comprising a junction of dissimilar materials, i.e. exhibiting Seebeck or Peltier effect with or without other thermoelectric effects or thermomagnetic effects; Processes or apparatus peculiar to the manufacture or treatment thereof or of parts thereof; Details thereof** (devices consisting of a plurality of solid state components formed in or on a common substrate H01L 27/00)	<administrative transfer to H10N10/00>
D	H01L35/02	1	Details	<administrative transfer to H10N10/80>
D	H01L35/04	2	Structural details of the junction; Connections of leads	<administrative transfer to H10N10/81>
D	H01L35/06	3	detachable, e.g. using a spring	<administrative transfer to H10N10/813>
D	H01L35/08	3	non-detachable, e.g. cemented, sintered, soldered {, e.g. thin films}	<administrative transfer to H10N10/817>
D	H01L35/10	3	Connections of leads	<administrative transfer to H10N10/82>

D	H01L35/12	1	Selection of the material for the legs of the junction	\<administrative transfer to H10N10/85\>
D	H01L35/14	2	using inorganic compositions	\<administrative transfer to H10N10/851\>
D	H01L35/16	3	comprising tellurium or selenium or sulfur	\<administrative transfer to H10N10/852\>
D	H01L35/18	3	comprising arsenic or antimony or bismuth (H01L35/16 takes precedence), {e.g. $A_{III}B_V$ compounds}	\<administrative transfer to H10N10/853\>
D	H01L35/20	3	comprising metals only (H01L35/16, H01L35/18 take precedence)	\<administrative transfer to H10N10/854\>
D	H01L35/22	3	comprising compounds containing boron, carbon, oxygen or nitrogen {or germanium or silicon, e.g. superconductors}	\<administrative transfer to H10N10/855\>
D	H01L35/225	4	{Superconducting materials}	\<administrative transfer to H10N10/8552\>
D	H01L35/24	2	using organic compositions	\<administrative transfer to H10N10/856\>
D	H01L35/26	2	using compositions changing continuously or discontinuously inside the material	\<administrative transfer to H10N10/857\>
D	H01L35/28	1	operating with Peltier or Seebeck effect only	\<administrative transfer to H10N10/10\>
D	H01L35/30	2	characterised by the heat-exchanging means at the junction	\<administrative transfer to H10N10/13\>
D	H01L35/32	2	characterised by the structure or configuration of the cell or thermocouple forming the device {including details about housing, insulation, geometry or module}	\<administrative transfer to H10N10/17\>
D	H01L35/325	3	{Cascades of thermocouples}	\<administrative transfer to H10N19/101\>
D	H01L35/34	1	Processes or apparatus specially adapted for peculiar to the manufacture or treatment of these devices or of parts thereof	\<administrative transfer to H10N10/01\>
D	H01L37/00	0	Thermoelectric devices without a junction of dissimilar materials; Thermomagnetic devices, e.g. using Nernst-Ettinghausen effect; Processes or apparatus peculiar to the manufacture or treatment thereof or of parts thereof (devices consisting of a plurality of solid state components formed in or on a common substrate H01L 27/00)	\<administrative transfer to H10N15/00\>
D	H01L37/02	1	using thermal change of dielectric constant, e.g. working above and below Curie point {, e.g. pyroelectric devices}	\<administrative transfer to H10N15/10\>
D	H01L37/025	2	{Selection of materials}	\<administrative transfer to H10N15/15\>
D	H01L37/04	1	using thermal change of magnetic permeability, e.g. working above and below the Curie point {, e.g. pyromagnetic devices}	\<administrative transfer to H10N15/20\>

D	H01L39/00	0	Devices using superconductivity; Processes or apparatus peculiar to the manufacture or treatment thereof or of parts thereof (devices consisting of a plurality of solid state components formed in or on a common substrate H01L 27/00; {light detection G01J, G02F 2/00; application to memories G11C 11/44, G11C 15/00, G11C 19/32} ; superconducting conductors cables or transmission lines H01B 12/00; {microwaves H01P 7/00, H01P 11/00} ; superconductive coils or windings H01F; amplifiers using superconductivity H03F 19/00; {impulse generators and logic circuits H03K 3/38, H03K 17/92, H03K 19/195; lasers H01S 3/00, H01S 5/00})	<administrative transfer to H10N60/00>
D	H01L39/005	1	{Alleged superconductivity}	<administrative transfer to H10N60/99>
D	H01L39/02	1	Details	<administrative transfer to H10N60/80>
D	H01L39/025	2	{for Josephson devices}	<administrative transfer to H10N60/805>
D	H01L39/04	2	Containers; Mountings	<administrative transfer to H10N60/81>
D	H01L39/045	3	{for Josephson devices}	<administrative transfer to H10N60/815>
D	H01L39/06	2	characterised by the current path	<administrative transfer to H10N60/82>
D	H01L39/08	2	characterised by the shape of the element	<administrative transfer to H10N60/83>
D	H01L39/10	2	characterised by the means for switching {between superconductive and normal states}	<administrative transfer to H10N60/84>
D	H01L39/12	2	characterised by the material	<administrative transfer to H10N60/85>
D	H01L39/121	3	{Organic materials}	<administrative transfer to H10N60/851>
D	H01L39/123	4	{Fullerene superconductors, e.g. soccerball-shaped allotrope of carbon, e.g. C_{60}, C_{94} (fullerenes in general C07C 13/00)}	<administrative transfer to H10N60/853>
D	H01L39/125	3	{Ceramic materials}	<administrative transfer to H10N60/855>
D	H01L39/126	4	{comprising copper oxide}	<administrative transfer to H10N60/857>
D	H01L39/128	5	{Multi-layered structures, e.g. super lattices}	<administrative transfer to H10N60/858>
D	H01L39/14	1	Permanent superconductor devices	<administrative transfer to H10N60/20>
D	H01L39/141	2	{comprising metal borides, e.g. MgB_2}	<administrative transfer to H10N60/202>

D	H01L39/143	2	{comprising high Tc ceramic materials}	\<administrative transfer to H10N60/203\>
D	H01L39/145	2	{Three or more electrode devices (H01L39/228 takes precedence)}	\<administrative transfer to H10N60/205\>
D	H01L39/146	3	{Field effect devices}	\<administrative transfer to H10N60/207\>
D	H01L39/148	2	{Abrikosov vortex devices}	\<administrative transfer to H10N60/208\>
D	H01L39/16	1	Devices switchable between superconductive and normal states {, e.g. switches, current limiters (circuits for current limitation using superconductor elements H02H9/023)}	\<administrative transfer to H10N60/30\>
D	H01L39/18	2	Cryotrons	\<administrative transfer to H10N60/35\>
D	H01L39/20	3	Power cryotrons	\<administrative transfer to H10N60/355\>
D	H01L39/22	1	Devices comprising a junction of dissimilar materials, e.g. Josephson-effect devices	\<administrative transfer to H10N60/10\>
D	H01L39/221	2	{Single electron tunnelling devices}	\<administrative transfer to H10N60/11\>
D	H01L39/223	2	{Josephson-effect devices}	\<administrative transfer to H10N60/12\>
D	H01L39/225	3	{comprising high Tc ceramic materials}	\<administrative transfer to H10N60/124\>
D	H01L39/226	3	{comprising metal borides, e.g. MgB_2}	\<administrative transfer to H10N60/126\>
D	H01L39/228	2	{three or more electrode devices, e.g. transistor-like structures}	\<administrative transfer to H10N60/128\>
D	H01L39/24	1	Processes or apparatus peculiar to the manufacture or treatment of devices provided for in H01L39/00 or of parts thereof	\<administrative transfer to H10N60/01\>
D	H01L39/2403	2	{Processes peculiar to the manufacture or treatment of composite superconductor filaments (comprising copper oxide H01L39/2419)}	\<administrative transfer to H10N60/0128\>
D	H01L39/2406	2	{of devices comprising Nb or an alloy of Nb with one or more of the elements of group 4, e.g. Ti, Zr, Hf}	\<administrative transfer to H10N60/0156\>
D	H01L39/2409	2	{of devices comprising an intermetallic compound of type A-15, e.g. Nb_3Sn}	\<administrative transfer to H10N60/0184\>
D	H01L39/2412	2	{of devices comprising molybdenum chalcogenides}	\<administrative transfer to H10N60/0212\>
D	H01L39/2416	2	{of devices comprising nitrides or carbonitrides}	\<administrative transfer to H10N60/0241\>
D	H01L39/2419	2	{the superconducting material comprising copper oxide}	\<administrative transfer to H10N60/0268\>
D	H01L39/2422	3	{Processes for depositing or forming superconductor layers}	\<administrative transfer to H10N60/0296\>

D	H01L39/2425	4	{from a solution}	<administrative transfer to H10N60/0324>
D	H01L39/2429	4	{from a suspension or slurry, e.g. screen printing; doctor blade casting}	<administrative transfer to H10N60/0352>
D	H01L39/2432	4	{by evaporation independent of heat source, e.g. MBE}	<administrative transfer to H10N60/0381>
D	H01L39/2435	4	{by sputtering}	<administrative transfer to H10N60/0408>
D	H01L39/2438	4	{by chemical vapour deposition [CVD]}	<administrative transfer to H10N60/0436>
D	H01L39/2441	5	{by metalloorganic chemical vapour deposition [MOCVD]}	<administrative transfer to H10N60/0464>
D	H01L39/2445	4	{by thermal spraying, e.g. plasma deposition}	<administrative transfer to H10N60/0492>
D	H01L39/2448	4	{Pulsed laser deposition, e.g. laser sputtering; laser ablation}	<administrative transfer to H10N60/0521>
D	H01L39/2451	4	{Precursor deposition followed by after-treatment, e.g. oxidation}	<administrative transfer to H10N60/0548>
D	H01L39/2454	4	{characterised by the substrate}	<administrative transfer to H10N60/0576>
D	H01L39/2458	5	{Monocrystalline substrates, e.g. epitaxial growth}	<administrative transfer to H10N60/0604>
D	H01L39/2461	5	{Intermediate layers, e.g. for growth control}	<administrative transfer to H10N60/0632>
D	H01L39/2464	3	{After-treatment, e.g. patterning}	<administrative transfer to H10N60/0661>
D	H01L39/2467	4	{Etching}	<administrative transfer to H10N60/0688>
D	H01L39/247	4	{Passivation}	<administrative transfer to H10N60/0716>
D	H01L39/2474	3	{Manufacture or deposition of contacts or electrodes}	<administrative transfer to H10N60/0744>
D	H01L39/2477	3	{Processes including the use of precursors}	<administrative transfer to H10N60/0772>
D	H01L39/248	3	{Processes peculiar to the manufacture or treatment of filaments or composite wires}	<administrative transfer to H10N60/0801>
D	H01L39/2483	3	{Introducing flux pinning centres}	<administrative transfer to H10N60/0828>
D	H01L39/2487	2	{of devices comprising metal borides, e.g. MgB_2}	<administrative transfer to H10N60/0856>
D	H01L39/249	2	{Treatment of superconductive layers by irradiation, e.g. ion-beam, electron-beam, laser beam, X-rays (irradiation devices G21K, H01J)}	<administrative transfer to H10N60/0884>
D	H01L39/2493	2	{for Josephson devices}	<administrative transfer to H10N60/0912>
D	H01L39/2496	3	{comprising high Tc ceramic materials}	<administrative transfer to H10N60/0941>

D	H01L41/00	0	Piezo-electric devices in general; Electrostrictive devices in general; Magnetostrictive devices in general; Processes or apparatus specially adapted for the manufacture or treatment thereof or of parts thereof; Details thereof (devices consisting of a plurality of solid-state components formed in or on a common substrate H01L 27/00)	\<administrative transfer to H10N30/00>
D	H01L41/02	1	Details	\<administrative transfer to H10N30/80>
D	H01L41/04	2	of piezo-electric or electrostrictive devices	\<administrative transfer to H10N30/80>
D	H01L41/042	3	{Drive or control circuitry or methods for piezo-electric or electrostrictive devices not otherwise provided for}	\<administrative transfer to H10N30/802>
D	H01L41/044	4	{for piezoelectric transformers (conversion of DC or AC power H02M; for operating discharge lamps H05B41/282)}	\<administrative transfer to H10N30/804>
D	H01L41/047	3	Electrodes {or electrical connection arrangements}	\<administrative transfer to H10N30/87>
D	H01L41/0471	4	{Individual layer electrodes of multilayer piezo-electric or electrostrictive devices, e.g. internal electrodes}	\<administrative transfer to H10N30/871>
D	H01L41/0472	4	{Connection electrodes of multilayer piezo-electric or electrostrictive devices, e.g. external electrodes}	\<administrative transfer to H10N30/872>
D	H01L41/0474	5	{embedded within piezo-electric or electrostrictive material, e.g. via connections}	\<administrative transfer to H10N30/874>
D	H01L41/0475	4	{Further connection or lead arrangements, e.g. flexible wiring boards, terminal pins}	\<administrative transfer to H10N30/875>
D	H01L41/0477	4	{Conductive materials (in general H01B1/00)}	\<administrative transfer to H10N30/877>
D	H01L41/0478	5	{the principal material being non-metallic, e.g. oxide or carbon based}	\<administrative transfer to H10N30/878>
D	H01L41/053	3	Mounts, supports, enclosures or casings	\<administrative transfer to H10N30/88>
D	H01L41/0533	4	{Further insulation means against electrical, physical or chemical damage, e.g. protective coatings}	\<administrative transfer to H10N30/883>
D	H01L41/0536	4	{Mechanical prestressing means, e.g. springs (in general F16F1/00)}	\<administrative transfer to H10N30/886>
D	H01L41/06	2	of magnetostrictive devices	\<administrative transfer to H10N35/80>
D	H01L41/08	1	Piezo-electric or electrostrictive devices	\<administrative transfer to H10N30/00>
D	H01L41/0805	2	{based on piezo-electric or electrostrictive films or coatings}	\<administrative transfer to H10N 30/1051>
D	H01L41/081	3	{characterised by the underlying base, e.g. substrates}	\<administrative transfer to H10N 30/10513>

D	H01L41/0815	4	{Intermediate layers, e.g. barrier, adhesion or growth control buffer layers}	<administrative transfer to H10N 30/10516>
D	H01L41/082	2	{based on piezo-electric or electrostrictive fibres}	<administrative transfer to H10N 30/1061>
D	H01L41/0825	2	{with electrical and mechanical input and output, e.g. having combined actuator and sensor parts}	<administrative transfer to H10N 30/1071>
D	H01L41/083	2	having a stacked or multilayer structure	<administrative transfer to H10N30/50>
D	H01L41/0831	3	{with non-rectangular cross-section in stacking direction, e.g. polygonal, trapezoidal}	<administrative transfer to H10N30/501>
D	H01L41/0833	3	{with non-rectangular cross-section orthogonal to the stacking direction, e.g. polygonal, circular}	<administrative transfer to H10N30/503>
D	H01L41/0835	4	{Annular cross-section}	<administrative transfer to H10N30/505>
D	H01L41/0836	3	{of cylindrical shape with stacking in radial direction, e.g. coaxial or spiral type rolls}	<administrative transfer to H10N30/506>
D	H01L41/0838	3	{adapted for alleviating internal stress, e.g. cracking control layers ("Sollbruchstellen")}	<administrative transfer to H10N30/508>
D	H01L41/087	2	formed as coaxial cables	<administrative transfer to H10N30/60>
D	H01L41/09	2	with electrical input and mechanical output {, e.g. actuators, vibrators (in frequency selective networks H03H9/00)}	<administrative transfer to H10N30/20>
D	H01L41/0906	3	{using longitudinal or thickness displacement combined with bending, shear or torsion displacement}	<administrative transfer to H10N30/202>
D	H01L41/0913	4	{with polygonal or rectangular shape}	<administrative transfer to H10N30/2023>
D	H01L41/092	4	{with cylindrical or annular shape}	<administrative transfer to H10N30/2027>
D	H01L41/0926	3	{using bending displacement, e.g. unimorph, bimorph or multimorph cantilever or membrane benders}	<administrative transfer to H10N30/204>
D	H01L41/0933	4	{Beam type}	<administrative transfer to H10N30/2041>
D	H01L41/094	5	{Cantilevers, i.e. having one fixed end}	<administrative transfer to H10N30/2042>
D	H01L41/0946	6	{connected at their free ends, e.g. parallelogram type}	<administrative transfer to H10N30/2043>
D	H01L41/0953	6	{with multiple segments mechanically connected in series, e.g. zig-zag type}	<administrative transfer to H10N30/2044>
D	H01L41/096	6	{adapted for in-plane bending displacement}	<administrative transfer to H10N30/2045>
D	H01L41/0966	6	{adapted for multi-directional bending displacement}	<administrative transfer to H10N30/2046>

D	H01L41/0973	4	{Membrane type}	<administrative transfer to H10N30/2047>
D	H01L41/098	5	{with non-planar shape}	<administrative transfer to H10N30/2048>
D	H01L41/0986	3	{using longitudinal or thickness displacement only, e.g. d33 or d31 type devices}	<administrative transfer to H10N30/206>
D	H01L41/0993	3	{using shear or torsion displacement, e.g. d15 type devices}	<administrative transfer to H10N30/208>
D	H01L41/107	2	with electrical input and electrical output {, e.g. transformers}	<administrative transfer to H10N30/40>
D	H01L41/113	2	with mechanical input and electrical output {, e.g. generators, sensors}	<administrative transfer to H10N30/30>
D	H01L41/1132	3	{Sensors}	<administrative transfer to H10N30/302>
D	H01L41/1134	3	{Beam type}	<administrative transfer to H10N30/304>
D	H01L41/1136	4	{Cantilevers}	<administrative transfer to H10N30/306>
D	H01L41/1138	3	{Membrane type}	<administrative transfer to H10N30/308>
D	H01L41/12	1	Magnetostrictive devices	<administrative transfer to H10N35/00>
D	H01L41/125	2	{with mechanical input and electrical output, e.g. generators, sensors}	<administrative transfer to H10N35/101>
D	H01L41/16	1	Selection of materials	<administrative transfer to H10N30/85>
D	H01L41/18	2	for piezo-electric or electrostrictive devices {, e.g. bulk piezo-electric crystals}	<administrative transfer to H10N30/85>
D	H01L41/183	3	{Composite materials, e.g. having 1-3 or 2-2 type connectivity}	<administrative transfer to H10N30/852>
D	H01L41/187	3	Ceramic compositions {, i.e. synthetic inorganic polycrystalline compounds incl. epitaxial, quasi-crystalline materials}	<administrative transfer to H10N30/853>
D	H01L41/1871	4	{Alkaline earth metal based oxides, e.g. barium titanates}	<administrative transfer to H10N30/8536>
D	H01L41/1873	4	{Alkali metal based oxides, e.g. lithium, sodium or potassium niobates}	<administrative transfer to H10N30/8542>
D	H01L41/1875	4	{Lead based oxides}	<administrative transfer to H10N30/8548>
D	H01L41/1876	5	{Lead zirconate titanate based}	<administrative transfer to H10N30/8554>
D	H01L41/1878	4	{Bismuth based oxides}	<administrative transfer to H10N30/8561>
D	H01L41/193	3	Macromolecular compositions {, e.g. piezo-electric polymers}	<administrative transfer to H10N30/857>
D	H01L41/20	2	for magnetostrictive devices	<administrative transfer to H10N35/85>

D	H01L41/22	1	Processes or apparatus specially adapted for the assembly, manufacture or treatment of piezo-electric or electrostrictive devices or of parts thereof	\<administrative transfer to H10N30/01\>
D	H01L41/23	2	Forming enclosures or casings	\<administrative transfer to H10N30/02\>
D	H01L41/25	2	Assembling devices that include piezo-electric or electrostrictive parts	\<administrative transfer to H10N30/03\>
D	H01L41/253	2	Treating devices or parts thereof to modify a piezo-electric or electrostrictive property, e.g. polarisation characteristics, vibration characteristics or mode tuning	\<administrative transfer to H10N30/04\>
D	H01L41/257	3	by polarising	\<administrative transfer to H10N30/045\>
D	H01L41/27	2	Manufacturing multilayered piezo-electric or electrostrictive devices or parts thereof, e.g. by stacking piezo-electric bodies and electrodes	\<administrative transfer to H10N30/05\>
D	H01L41/273	3	by integrally sintering piezo-electric or electrostrictive bodies and electrodes	\<administrative transfer to H10N30/053\>
D	H01L41/277	3	by stacking bulk piezo-electric or electrostrictive bodies and electrodes	\<administrative transfer to H10N30/057\>
D	H01L41/29	2	Forming electrodes, leads or terminal arrangements	\<administrative transfer to H10N30/06\>
D	H01L41/293	3	Connection electrodes of multilayered piezo-electric or electrostrictive parts	\<administrative transfer to H10N30/063\>
D	H01L41/297	3	Individual layer electrodes of multilayered piezo-electric or electrostrictive parts	\<administrative transfer to H10N30/067\>
D	H01L41/31	2	Applying piezo-electric or electrostrictive parts or bodies onto an electrical element or another base	\<administrative transfer to H10N30/07\>
D	H01L41/311	3	Mounting of piezo-electric or electrostrictive parts together with semiconductor elements, or other circuit elements, on a common substrate	\<administrative transfer to H10N30/071\>
D	H01L41/312	3	by laminating or bonding of piezo-electric or electrostrictive bodies	\<administrative transfer to H10N30/072\>
D	H01L41/313	4	by metal fusing or with adhesives	\<administrative transfer to H10N30/073\>
D	H01L41/314	3	by depositing piezo-electric or electrostrictive layers, e.g. aerosol or screen printing	\<administrative transfer to H10N30/074\>
D	H01L41/316	4	by vapour phase deposition	\<administrative transfer to H10N30/076\>
D	H01L41/317	4	by liquid phase deposition	\<administrative transfer to H10N30/077\>
D	H01L41/318	5	by sol-gel deposition	\<administrative transfer to H10N30/078\>
D	H01L41/319	4	using intermediate layers, e.g. for growth control	\<administrative transfer to H10N30/079\>

D	H01L41/33	2	Shaping or machining of piezo-electric or electrostrictive bodies	<administrative transfer to H10N30/08>
D	H01L41/331	3	by coating or depositing using masks, e.g. lift-off	<administrative transfer to H10N30/081>
D	H01L41/332	3	by etching, e.g. lithography	<administrative transfer to H10N30/082>
D	H01L41/333	3	by moulding or extrusion	<administrative transfer to H10N30/084>
D	H01L41/335	3	by machining	<administrative transfer to H10N30/085>
D	H01L41/337	4	by polishing or grinding	<administrative transfer to H10N30/086>
D	H01L41/338	4	by cutting or dicing	<administrative transfer to H10N30/088>
D	H01L41/339	4	by punching	<administrative transfer to H10N30/089>
D	H01L41/35	2	Forming piezo-electric or electrostrictive materials	<administrative transfer to H10N30/09>
D	H01L41/37	3	Composite materials	<administrative transfer to H10N30/092>
D	H01L41/39	3	Inorganic materials	<administrative transfer to H10N30/093>
D	H01L41/41	4	by melting	<administrative transfer to H10N30/095>
D	H01L41/43	4	by sintering	<administrative transfer to H10N30/097>
D	H01L41/45	3	Organic materials	<administrative transfer to H10N30/098>
D	H01L41/47	1	Processes or apparatus specially adapted for the assembly, manufacture or treatment of magnetostrictive devices or of parts thereof	<administrative transfer to H10N35/01>
D	H01L43/00	0	Devices using galvano-magnetic or similar magnetic effects; Processes or apparatus specially adapted for the manufacture or treatment thereof or of parts thereof (devices consisting of a plurality of solid state components formed in or on a common substrate H01L 27/00)	<administrative transfer to H10N50/00>
D	H01L43/02	1	Details	<administrative transfer to H10N50/80>
D	H01L43/04	2	of Hall-effect devices	<administrative transfer to H10N52/80>
D	H01L43/06	1	Hall-effect devices	<administrative transfer to H10N52/00>
D	H01L43/065	2	{Semiconductor Hall-effect devices}	<administrative transfer to H10N52/101>
D	H01L43/08	1	Magnetic-field-controlled resistors	<administrative transfer to H10N50/10>

D	H01L43/10	1	Selection of materials	<administrative transfer to H10N50/85>
D	H01L43/12	1	Processes or apparatus specially adapted for the manufacture or treatment of these devices or of parts thereof	<administrative transfer to H10N50/01>
D	H01L43/14	2	for Hall-effect devices	<administrative transfer to H10N52/01>
D	H01L45/00	0	Solid state devices adapted for rectifying, amplifying, oscillating or switching without a potential-jump barrier or surface barrier, e.g. dielectric triodes; Ovshinsky-effect devices; Processes or apparatus peculiar to the manufacture or treatment thereof or of parts thereof (devices consisting of a plurality of solid state components formed in or on a common substrate H01L 27/00; devices using superconductivity H01L 39/00; piezo-electric devices H01L 41/00; bulk negative resistance effect devices H01L 47/00; {memories G11C 11/34; G11C 13/0002; amplifying circuits H03F 11/00; pulse generation H03K 3/02; electronic switching circuits H03K 17/00; logic circuits H03K 19/00})	<administrative transfer to H10N70/00>
D	H01L45/005	1	{Charge density wave transport devices}	<administrative transfer to H10N70/151>
D	H01L45/02	1	Solid state travelling-wave devices	<administrative transfer to H10N70/10>
D	H01L45/04	1	{Bistable or multistable switching devices, e.g. for resistance switching non-volatile memory}	<administrative transfer to H10N70/20>
D	H01L45/06	2	{based on solid-state phase change, e.g. between amorphous and crystalline phases, Ovshinsky effect}	<administrative transfer to H10N70/231>
D	H01L45/065	3	{between different crystalline phases, e.g. cubic and hexagonal}	<administrative transfer to H10N70/235>
D	H01L45/08	2	{based on migration or redistribution of ionic species, e.g. anions, vacancies}	<administrative transfer to H10N70/24>
D	H01L45/085	3	{the species being metal cations, e.g. programmable metallization cells}	<administrative transfer to H10N70/245>
D	H01L45/10	2	{based on bulk electronic defects, e.g. trapping of electrons}	<administrative transfer to H10N70/25>
D	H01L45/12	2	{Details}	<administrative transfer to H10N70/801>
D	H01L45/1206	3	{Three or more terminal devices, e.g. transistor like devices}	<administrative transfer to H10N70/253>
D	H01L45/1213	3	{Radiation or particle beam assisted switching devices, e.g. optically controlled devices}	<administrative transfer to H10N70/257>
D	H01L45/122	3	{Device geometry}	<administrative transfer to H10N 70/821>

D	H01L45/1226	4	{adapted for essentially horizontal current flow, e.g. bridge type devices}	<administrative transfer to H10N 70/823>
D	H01L45/1233	4	{adapted for essentially vertical current flow, e.g. sandwich or pillar type devices}	<administrative transfer to H10N 70/826>
D	H01L45/124	5	{on sidewalls of dielectric structures, e.g. mesa or cup type devices}	<administrative transfer to H10N 70/8265>
D	H01L45/1246	4	{Further means within the switching material region to limit current flow, e.g. constrictions}	<administrative transfer to H10N 70/828>
D	H01L45/1253	3	{Electrodes}	<administrative transfer to H10N 70/841>
D	H01L45/126	4	{adapted for resistive heating}	<administrative transfer to H10N 70/8413>
D	H01L45/1266	4	{adapted for supplying ionic species}	<administrative transfer to H10N 70/8416>
D	H01L45/1273	4	{adapted for electric field or current focusing, e.g. tip shaped}	<administrative transfer to H10N 70/8418>
D	H01L45/128	3	{Thermal details}	<administrative transfer to H10N 70/861>
D	H01L45/1286	4	{Heating or cooling means other than resistive heating electrodes, e.g. heater in parallel}	<administrative transfer to H10N 70/8613>
D	H01L45/1293	4	{Thermal insulation means}	<administrative transfer to H10N 70/8616>
D	H01L45/14	2	{Selection of switching materials}	<administrative transfer to H10N 70/881>
D	H01L45/141	3	{Compounds of sulfur, selenium or tellurium, e.g. chalcogenides}	<administrative transfer to H10N 70/882>
D	H01L45/142	4	{Sulfides, e.g. CuS}	<administrative transfer to H10N 70/8822>
D	H01L45/143	4	{Selenides, e.g. GeSe}	<administrative transfer to H10N 70/8825>
D	H01L45/144	4	{Tellurides, e.g. GeSbTe}	<administrative transfer to H10N 70/8828>
D	H01L45/145	3	{Oxides or nitrides}	<administrative transfer to H10N 70/883>
D	H01L45/146	4	{Binary metal oxides, e.g. TaOx}	<administrative transfer to H10N 70/8833>
D	H01L45/147	4	{Complex metal oxides, e.g. perovskites, spinels}	<administrative transfer to H10N 70/8836>
D	H01L45/148	3	{Other compounds of groups 13-15, e.g. elemental or compound semiconductors}	<administrative transfer to H10N 70/884>
D	H01L45/149	4	{Carbon or carbides}	<administrative transfer to H10N 70/8845>
D	H01L45/16	2	{Manufacturing}	<administrative transfer to H10N70/011>
D	H01L45/1608	3	{Formation of the switching material, e.g. layer deposition}	<administrative transfer to H10N70/021>
D	H01L45/1616	4	{by chemical vapor deposition, e.g. MOCVD, ALD}	<administrative transfer to H10N70/023>

D	H01L45/1625	4	{by physical vapor deposition, e.g. sputtering}	\<administrative transfer to H10N70/026\>
D	H01L45/1633	4	{by conversion of electrode material, e.g. oxidation}	\<administrative transfer to H10N70/028\>
D	H01L45/1641	3	{Modification of the switching material, e.g. post-treatment, doping}	\<administrative transfer to H10N70/041\>
D	H01L45/165	4	{by implantation}	\<administrative transfer to H10N70/043\>
D	H01L45/1658	4	{by diffusion, e.g. photo-dissolution}	\<administrative transfer to H10N70/046\>
D	H01L45/1666	3	{Patterning of the switching material}	\<administrative transfer to H10N70/061\>
D	H01L45/1675	4	{by etching of pre-deposited switching material layers, e.g. lithography}	\<administrative transfer to H10N70/063\>
D	H01L45/1683	4	{by filling of openings, e.g. damascene method}	\<administrative transfer to H10N70/066\>
D	H01L45/1691	4	{Patterning process specially adapted for achieving sub-lithographic dimensions, e.g. using spacers}	\<administrative transfer to H10N70/068\>
D	H01L47/00	0	Bulk negative resistance effect devices, e.g. Gunn-effect devices; Processes or apparatus peculiar to the manufacture or treatment thereof or of parts thereof (devices consisting of a plurality of solid state components formed in or on a common substrate H01L 27/00)	\<administrative transfer to H10N80/00\>
D	H01L47/005	1	{Processes or apparatus peculiar to the manufacture or treatment of these devices or of parts thereof (not peculiar thereto H01L21/00)}	\<administrative transfer to H10N80/01\>
D	H01L47/02	1	Gunn-effect devices {or transferred electron devices}	\<administrative transfer to H10N80/10\>
D	H01L47/023	2	{controlled by electromagnetic radiation}	\<administrative transfer to H10N80/103\>
D	H01L47/026	2	{Gunn diodes (H01L47/02 takes precedence)}	\<administrative transfer to H10N80/107\>
D	H01L49/00	0	Solid state devices not provided for in groups H01L 27/00 - H01L 47/00 and H01L 51/00 and not provided for in any other subclass; Processes or apparatus peculiar to the manufacture or treatment thereof or of parts thereof	\<administrative transfer to H10N99/00\>
D	H01L49/003	1	{Devices using Mott metal-insulator transition, e.g. field effect transistors}	\<administrative transfer to H10N99/03\>
D	H01L49/006	1	{Quantum devices, e.g. Quantum Interference Devices, Metal Single Electron Transistor (using semiconductors in the active part H01L29/00)}	\<administrative transfer to H10N99/05\>
D	H01L49/02	1	Thin-film or thick-film devices	\<administrative transfer to H10N97/00\>

SUBCLASS H10N - ELECTRIC SOLID-STATE DEVICES NOT OTHERWISE PROVIDED FOR

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#
N	H10N	Subclass	**ELECTRIC SOLID-STATE DEVICES NOT OTHERWISE PROVIDED FOR**	
N	H10N10/00	0	**Thermoelectric devices comprising a junction of dissimilar materials, i.e. devices exhibiting Seebeck or Peltier effects** (integrated devices or assemblies of multiple devices H10N19/00)	
N	H10N10/01	1	Manufacture or treatment	
N	H10N10/10	1	operating with only the Peltier or Seebeck effects	
N	H10N10/13	2	characterised by the heat-exchanging means at the junction	
N	H10N10/17	2	characterised by the structure or configuration of the cell or thermocouple forming the device	
N	H10N10/80	1	Constructional details	
N	H10N10/81	2	Structural details of the junction	
N	H10N10/813	3	the junction being separable, e.g. using a spring	
N	H10N10/817	3	the junction being non-separable, e.g. being cemented, sintered or soldered	
N	H10N10/82	2	Connection of interconnections	
N	H10N10/85	2	Thermoelectric active materials	
N	H10N10/851	3	comprising inorganic compositions	
N	H10N10/852	4	comprising tellurium, selenium or sulfur	
N	H10N10/853	4	comprising arsenic, antimony or bismuth (H10N10/852 takes precedence)	
N	H10N10/854	4	comprising only metals (H10N10/852, H10N10/853 take precedence)	
Q	H10N10/855	4	comprising compounds containing boron, carbon, oxygen or nitrogen	H10N10/855, H10N10/8556
N	H10N10/8552	5	{the compounds being superconducting}	
N	H10N10/8556	4	{comprising compounds containing germanium or silicon}	
N	H10N10/856	3	comprising organic compositions	
N	H10N10/857	3	comprising compositions changing continuously or discontinuously inside the material	
N	H10N15/00	0	Thermoelectric devices without a junction of dissimilar materials; Thermomagnetic devices, e.g. using the Nernst-Ettingshausen effect	

			(integrated devices or assemblies of multiple devices H10N19/00)	
N	H10N15/10	1	Thermoelectric devices using thermal change of the dielectric constant, e.g. working above and below the Curie point	
N	H10N15/15	2	{Selection of materials}	
N	H10N15/20	1	Thermomagnetic devices using thermal change of the magnetic permeability, e.g. working above and below the Curie point	
N	H10N19/00	0	Integrated devices, or assemblies of multiple devices, comprising at least one thermoelectric or thermomagnetic element covered by groups H10N10/00 - H10N15/00	
N	H10N19/101	1	{Multiple thermocouples connected in a cascade arrangement}	
Q	H10N30/00	0	**Piezoelectric or electrostrictive devices** (integrated devices or assemblies of multiple devices H10N39/00)	H10N30/00, H10N35/00
N	H10N30/01	1	Manufacture or treatment	
N	H10N30/02	2	Forming enclosures or casings	
N	H10N30/03	2	Assembling devices that include piezoelectric or electrostrictive parts	
N	H10N30/04	2	Treatments to modify a piezoelectric or electrostrictive property, e.g. polarisation characteristics, vibration characteristics or mode tuning	
N	H10N30/045	3	by polarising	
N	H10N30/05	2	Manufacture of multilayered piezoelectric or electrostrictive devices, or parts thereof, e.g. by stacking piezoelectric bodies and electrodes	
N	H10N30/053	3	by integrally sintering piezoelectric or electrostrictive bodies and electrodes	
N	H10N30/057	3	by stacking bulk piezoelectric or electrostrictive bodies and electrodes	
N	H10N30/06	2	Forming electrodes or interconnections, e.g. leads or terminals	
N	H10N30/063	3	Forming interconnections, e.g. connection electrodes of multilayered piezoelectric or electrostrictive parts	
N	H10N30/067	3	Forming single-layered electrodes of multilayered piezoelectric or electrostrictive parts	
N	H10N30/07	2	Forming of piezoelectric or electrostrictive parts or bodies on an electrical element or another base	
N	H10N30/071	3	Mounting of piezoelectric or electrostrictive parts together with semiconductor elements, or other circuit elements, on a common substrate	

N	H10N30/072	3	by laminating or bonding of piezoelectric or electrostrictive bodies	
N	H10N30/073	4	by fusion of metals or by adhesives	
N	H10N30/074	3	by depositing piezoelectric or electrostrictive layers, e.g. aerosol or screen printing	
N	H10N30/076	4	by vapour phase deposition	
N	H10N30/077	4	by liquid phase deposition	
N	H10N30/078	5	by sol-gel deposition	
N	H10N30/079	4	using intermediate layers, e.g. for growth control	
N	H10N30/08	2	Shaping or machining of piezoelectric or electrostrictive bodies	
N	H10N30/081	3	by coating or depositing using masks, e.g. lift-off	
N	H10N30/082	3	by etching, e.g. lithography	
N	H10N30/084	3	by moulding or extrusion	
N	H10N30/085	3	by machining	
N	H10N30/086	4	by polishing or grinding	
N	H10N30/088	4	by cutting or dicing	
N	H10N30/089	4	by punching	
N	H10N30/09	2	Forming piezoelectric or electrostrictive materials	
N	H10N30/092	3	Forming composite materials	
N	H10N30/093	3	Forming inorganic materials	
N	H10N30/095	4	by melting	
N	H10N30/097	4	by sintering	
N	H10N30/098	3	Forming organic materials	
N	H10N30/1051	1	{based on piezoelectric or electrostrictive films or coatings}	
N	H10N30/10513	2	{characterised by the underlying bases, e.g. substrates}	
N	H10N30/10516	3	{Intermediate layers, e.g. barrier, adhesion or growth control buffer layers}	
N	H10N30/1061	1	{based on piezoelectric or electrostrictive fibres}	
N	H10N30/1071	1	{with electrical and mechanical input and output, e.g. having combined actuator and sensor parts}	
N	H10N30/20	1	with electrical input and mechanical output, e.g. functioning as actuators or vibrators	
N	H10N30/202	2	{using longitudinal or thickness displacement combined with bending, shear or torsion displacement}	

N	H10N30/2023	3	{having polygonal or rectangular shape}	
N	H10N30/2027	3	{having cylindrical or annular shape}	
N	H10N30/204	2	{using bending displacement, e.g. unimorph, bimorph or multimorph cantilever or membrane benders}	
N	H10N30/2041	3	{Beam type}	
N	H10N30/2042	4	{Cantilevers, i.e. having one fixed end}	
N	H10N30/2043	5	{connected at their free ends, e.g. parallelogram type}	
N	H10N30/2044	5	{having multiple segments mechanically connected in series, e.g. zig-zag type}	
N	H10N30/2045	5	{adapted for in-plane bending displacement}	
N	H10N30/2046	5	{adapted for multi-directional bending displacement}	
N	H10N30/2047	3	{Membrane type}	
N	H10N30/2048	4	{having non-planar shape}	
N	H10N30/206	2	{using only longitudinal or thickness displacement, e.g. d_{33} or d_{31} type devices}	
N	H10N30/208	2	{using shear or torsion displacement, e.g. d_{15} type devices}	
N	H10N30/30	1	with mechanical input and electrical output, e.g. functioning as generators or sensors	
N	H10N30/302	2	{Sensors}	
N	H10N30/304	2	{Beam type}	
N	H10N30/306	3	{Cantilevers}	
N	H10N30/308	2	{Membrane type}	
N	H10N30/40	1	with electrical input and electrical output, e.g. functioning as transformers	
N	H10N30/50	1	having a stacked or multilayer structure	
N	H10N30/501	2	{with non-rectangular cross-section in stacking direction, e.g. polygonal, trapezoidal}	
N	H10N30/503	2	{with non-rectangular cross-section orthogonal to the stacking direction, e.g. polygonal, circular}	
N	H10N30/505	3	{Annular cross-section}	
N	H10N30/506	2	{of cylindrical shape with stacking in radial direction, e.g. coaxial or spiral type rolls}	
N	H10N30/508	2	{adapted for alleviating internal stress, e.g. cracking control layers}	
N	H10N30/60	1	having a coaxial cable structure	
Q	H10N30/80	1	Constructional details	H10N30/80, H10N35/80
N	H10N30/802	2	{Drive or control circuitry or methods for piezoelectric or electrostrictive devices not otherwise provided for}	

N	H10N30/804	3	{for piezoelectric transformers (conversion of DC or AC power H02M; for operating discharge lamps H05B41/282)}	
Q	H10N30/85	2	Piezoelectric or electrostrictive active materials	H10N30/85, H10N35/85
N	H10N30/852	3	{Composite materials, e.g. having 1-3 or 2-2 type connectivity}	
N	H10N30/853	3	Ceramic compositions	
N	H10N30/8536	4	{Alkaline earth metal based oxides, e.g. barium titanates}	
N	H10N30/8542	4	{Alkali metal based oxides, e.g. lithium, sodium or potassium niobates}	
N	H10N30/8548	4	{Lead based oxides}	
N	H10N30/8554	5	{Lead zirconium titanate based}	
N	H10N30/8561	4	{Bismuth based oxides}	
N	H10N30/857	3	Macromolecular compositions	
N	H10N30/87	2	Electrodes or interconnections, e.g. leads or terminals	
N	H10N30/871	3	{Single-layered electrodes of multilayer piezoelectric or electrostrictive devices, e.g. internal electrodes}	
N	H10N30/872	3	{Connection electrodes of multilayer piezoelectric or electrostrictive devices, e.g. external electrodes}	
N	H10N30/874	4	{embedded within piezoelectric or electrostrictive material, e.g. via connections}	
N	H10N30/875	3	{Further connection or lead arrangements, e.g. flexible wiring boards, terminal pins}	
N	H10N30/877	3	{Conductive materials (in general H01B1/00)}	
N	H10N30/878	4	{the principal material being non-metallic, e.g. oxide or carbon based}	
N	H10N30/88	2	Mounts; Supports; Enclosures; Casings	
N	H10N30/883	3	{Further insulation means against electrical, physical or chemical damage, e.g. protective coatings}	
N	H10N30/886	3	{Mechanical prestressing means, e.g. springs (springs in general F16F1/00)}	
N	H10N35/00	0	**Magnetostrictive devices** (integrated devices or assemblies of multiple devices H10N39/00)	
N	H10N35/01	1	Manufacture or treatment	
N	H10N35/101	1	{with mechanical input and electrical output, e.g. generators, sensors}	
N	H10N35/80	1	Constructional details	
N	H10N35/85	2	Magnetostrictive active materials	
N	H10N39/00	0	**Integrated devices, or assemblies of multiple devices, comprising at least one piezoelectric,**	

			electrostrictive or magnetostrictive element covered by groups H10N30/00 – H10N35/00	
Q	H10N50/00	0	**Galvanomagnetic devices** (Hall-effect devices H10N52/00; integrated devices or assemblies of multiple devices H10N59/00)	H10N50/00, H10N50/20
N	H10N50/01	1	Manufacture or treatment	
N	H10N50/10	1	Magnetoresistive devices	
N	H10N50/20	1	Spin-polarised current-controlled devices (magnetoresistive devices H10N50/10)	
N	H10N50/80	1	Constructional details	
Q	H10N50/85	2	Magnetic active materials	H10N50/85, H10N52/85
N	H10N52/00	0	**Hall-effect devices** (integrated devices or assemblies of multiple devices H10N59/00)	
N	H10N52/01	1	Manufacture or treatment	
N	H10N52/101	1	{Semiconductor Hall-effect devices}	
N	H10N52/80	1	Constructional details	
N	H10N52/85	2	Magnetic active materials	
Q	H10N59/00	0	**Integrated devices, or assemblies of multiple devices, comprising at least one galvanomagnetic or Hall-effect element covered by groups H10N 50/00 - H10N 52/00** (MRAM devices H10B 61/00)	H10N59/00, H10B61/00
N	H10N60/00	0	**Superconducting devices** (integrated devices or assemblies of multiple devices H10N69/00)	
N	H10N60/01	1	Manufacture or treatment	
N	H10N60/0128	2	{of composite superconductor filaments (comprising copper oxide H10N60/0268)}	
N	H10N60/0156	2	{of devices comprising Nb or an alloy of Nb with one or more of the elements of group 4, e.g. Ti, Zr, Hf}	
N	H10N60/0184	2	{of devices comprising intermetallic compounds of type A-15, e.g. Nb_3Sn}	
N	H10N60/0212	2	{of devices comprising molybdenum chalcogenides}	
N	H10N60/0241	2	{of devices comprising nitrides or carbonitrides}	
N	H10N60/0268	2	{of devices comprising copper oxide}	
N	H10N60/0296	3	{Processes for depositing or forming superconductor layers}	
N	H10N60/0324	4	{from a solution}	
N	H10N60/0352	4	{from a suspension or slurry, e.g. screen printing; doctor blade casting}	
N	H10N60/0381	4	{by evaporation independent of heat source, e.g. MBE}	
N	H10N60/0408	4	{by sputtering}	

N	H10N60/0436	4	{by chemical vapour deposition [CVD]}	
N	H10N60/0464	5	{by metalloorganic chemical vapour deposition [MOCVD]}	
N	H10N60/0492	4	{by thermal spraying, e.g. plasma deposition}	
N	H10N60/0521	4	{by pulsed laser deposition, e.g. laser sputtering; laser ablation}	
N	H10N60/0548	4	{by precursor deposition followed by after-treatment, e.g. oxidation}	
N	H10N60/0576	4	{characterised by the substrate}	
N	H10N60/0604	5	{Monocrystalline substrates, e.g. epitaxial growth}	
N	H10N60/0632	5	{Intermediate layers, e.g. for growth control}	
N	H10N60/0661	3	{After-treatment, e.g. patterning}	
N	H10N60/0688	4	{Etching}	
N	H10N60/0716	4	{Passivation}	
N	H10N60/0744	3	{Manufacture or deposition of contacts or electrodes}	
N	H10N60/0772	3	{Processes including the use of precursors}	
N	H10N60/0801	3	{Processes peculiar to the manufacture or treatment of filaments or composite wires}	
N	H10N60/0828	3	{Introducing flux pinning centres}	
N	H10N60/0856	2	{of devices comprising metal borides, e.g. MgB_2}	
N	H10N60/0884	2	{Treatment of superconductor layers by irradiation, e.g. ion-beam, electron-beam, laser beam, X-rays (irradiation devices G21K, H01J)}	
N	H10N60/0912	2	{of Josephson-effect devices}	
N	H10N60/0941	3	{comprising high-T_c ceramic materials}	
N	H10N60/10	1	Junction-based devices	
N	H10N60/11	2	{Single electron tunnelling devices}	
N	H10N60/12	2	Josephson-effect devices	
N	H10N60/124	3	{comprising high-T_c ceramic materials}	
N	H10N60/126	3	{comprising metal borides, e.g. MgB_2}	
N	H10N60/128	2	{having three or more electrodes, e.g. transistor-like structures}	
N	H10N60/20	1	Permanent superconducting devices	
N	H10N60/202	2	{comprising metal borides, e.g. MgB_2}	
N	H10N60/203	2	{comprising high-T_c ceramic materials}	
N	H10N60/205	2	{having three or more electrodes, e.g. transistor-like structures (H10N60/128 takes precedence)}	

N	H10N60/207	3	{Field effect devices}	
N	H10N60/208	2	{based on Abrikosov vortices}	
N	H10N60/30	1	Devices switchable between superconducting and normal states	
N	H10N60/35	2	Cryotrons	
N	H10N60/355	3	Power cryotrons	
N	H10N60/80	1	Constructional details	
N	H10N60/805	2	{for Josephson-effect devices}	
N	H10N60/81	2	Containers; Mountings	
N	H10N60/815	3	{for Josephson-effect devices}	
N	H10N60/82	2	Current path	
N	H10N60/83	2	Element shape	
N	H10N60/84	2	Switching means for devices switchable between superconducting and normal states	
N	H10N60/85	2	Superconducting active materials	
N	H10N60/851	3	{Organic materials}	
N	H10N60/853	4	{Fullerene superconductors, e.g. soccerball-shaped allotrope of carbon, e.g. C_{60}, C_{94} (fullerenes in general C07C13/00)}	
N	H10N60/855	3	{Ceramic materials}	
N	H10N60/857	4	{comprising copper oxide}	
N	H10N60/858	5	{Multi-layered structures, e.g. superlattices}	
N	H10N60/99	1	{Alleged superconductivity}	
N	H10N69/00	0	**Integrated devices, or assemblies of multiple devices, comprising at least one superconducting element covered by group H10N60/00**	
N	H10N70/00	0	**Solid-state devices without a potential-jump barrier or surface barrier, and specially adapted for rectifying, amplifying, oscillating or switching** (integrated devices or assemblies of multiple devices H10N79/00)	
N	H10N70/011	1	{Manufacture or treatment of multistable switching devices}	
N	H10N70/021	2	{Formation of the switching material, e.g. layer deposition}	
N	H10N70/023	3	{by chemical vapor deposition, e.g. MOCVD, ALD}	
N	H10N70/026	3	{by physical vapor deposition, e.g. sputtering}	
N	H10N70/028	3	{by conversion of electrode material, e.g. oxidation}	

N	H10N70/041	2	{Modification of the switching material, e.g. post-treatment, doping}	
N	H10N70/043	3	{by implantation}	
N	H10N70/046	3	{by diffusion, e.g. photo-dissolution}	
N	H10N70/061	2	{Patterning of the switching material}	
N	H10N70/063	3	{by etching of pre-deposited switching material layers, e.g. lithography}	
N	H10N70/066	3	{by filling of openings, e.g. damascene method}	
N	H10N70/068	3	{by processes specially adapted for achieving sub-lithographic dimensions, e.g. using spacers}	
N	H10N70/10	1	Solid-state travelling-wave devices	
N	H10N70/151	1	{Charge density wave transport devices}	
N	H10N70/20	1	Multistable switching devices, e.g. memristors	
N	H10N70/231	2	{based on solid-state phase change, e.g. between amorphous and crystalline phases, Ovshinsky effect}	
N	H10N70/235	3	{between different crystalline phases, e.g. cubic and hexagonal}	
N	H10N70/24	2	{based on migration or redistribution of ionic species, e.g. anions, vacancies}	
N	H10N70/245	3	{the species being metal cations, e.g. programmable metallization cells}	
N	H10N70/25	2	{based on bulk electronic defects, e.g. trapping of electrons}	
N	H10N70/253	2	{having three or more terminals, e.g. transistor-like devices}	
N	H10N70/257	2	{based on radiation or particle beam assisted switching, e.g. optically controlled devices}	
N	H10N70/801	1	{Constructional details of multistable switching devices}	
N	H10N 70/821	2	{Device geometry}	
N	H10N 70/823	3	{adapted for essentially horizontal current flow, e.g. bridge type devices}	
N	H10N 70/826	3	{adapted for essentially vertical current flow, e.g. sandwich or pillar type devices}	
N	H10N 70/8265	4	{on sidewalls of dielectric structures, e.g. mesa or cup type devices}	
N	H10N 70/828	3	{Current flow limiting means within the switching material region, e.g. constrictions}	
N	H10N 70/841	2	{Electrodes}	

N	H10N 70/8413	3	{adapted for resistive heating}	
N	H10N 70/8416	3	{adapted for supplying ionic species}	
N	H10N 70/8418	3	{adapted for focusing electric field or current, e.g. tip-shaped}	
N	H10N 70/861	2	{Thermal details}	
N	H10N 70/8613	3	{Heating or cooling means other than resistive heating electrodes, e.g. heater in parallel}	
N	H10N 70/8616	3	{Thermal insulation means}	
N	H10N 70/881	2	{Switching materials}	
N	H10N 70/882	3	{Compounds of sulfur, selenium or tellurium, e.g. chalcogenides}	
N	H10N 70/8822	4	{Sulfides, e.g. CuS}	
N	H10N 70/8825	4	{Selenides, e.g. GeSe}	
N	H10N 70/8828	4	{Tellurides, e.g. GeSbTe}	
N	H10N 70/883	3	{Oxides or nitrides}	
N	H10N 70/8833	4	{Binary metal oxides, e.g. TaO_x}	
N	H10N 70/8836	4	{Complex metal oxides, e.g. perovskites, spinels}	
N	H10N70/884	3	{Other compounds of groups 13-15, e.g. elemental or compound semiconductors}	
N	H10N 70/8845	4	{Carbon or carbides}	
N	H10N79/00	0	**Integrated devices, or assemblies of multiple devices, comprising at least one solid-state element covered by group H10N 70/00** (ReRAM devices H10B 63/00; PCRAM devices H10B 63/10)	
N	H10N80/00	0	**Bulk negative-resistance effect devices** (integrated devices or assemblies of multiple devices H10N89/00)	
N	H10N80/01	1	{Manufacture or treatment}	
N	H10N80/10	1	Gunn-effect devices	
N	H10N80/103	2	{controlled by electromagnetic radiation}	
N	H10N80/107	2	{Gunn diodes}	
N	H10N89/00	0	**Integrated devices, or assemblies of multiple devices, comprising at least one bulk negative resistance effect element covered by group H10N80/00**	
N	H10N89/02	1	{Gunn-effect devices}	
N	H10N97/00	0	**Electric solid-state thin-film or thick-film devices, not otherwise provided for**	
N	H10N99/00	0	**Subject matter not provided for in other groups of this subclass**	

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N	H10N99/03	1	{Devices using Mott metal-insulator transition, e.g. field effect transistors}	
N	H10N99/05	1	{Quantum devices, e.g. quantum interference devices, metal single electron transistors}	

*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.

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

SUBCLASS H01L - SEMICONDUCTOR DEVICES; ELECTRIC SOLID STATE DEVICES NOT OTHERWISE PROVIDED FOR

Type*	Location	Old Warning notice	New/Modified Warning notice
D	H01L 41/00	Delete entire warning	

SUBCLASS H10N - ELECTRIC SOLID-STATE DEVICES NOT OTHERWISE PROVIDED FOR

Type*	Location	Old Warning notice	New/Modified Warning notice
N	H10N 10/855		Group H10N 10/855 is impacted by reclassification into group H10N 10/8556. Groups H10N 10/855 and H10N 10/8556 should be considered in order to perform a complete search.
N	H10N 10/8556		Group H10N 10/8556 is incomplete pending reclassification of documents from group H10N 10/855. Groups H10N 10/855 and H10N 10/8556 should be considered in order to perform a complete search.
N	H10N 19/00		Group H10N 19/00 is incomplete pending reclassification of documents from groups H01L 25/16, H01L 25/162, H01L 25/165, H01L 25/167 and H01L 25/18. All groups listed in this Warning should be considered in order to perform a complete search.
N	H10N 30/00		Group H10N 30/00 is impacted by reclassification into group H10N 35/00. Groups H10N 30/00 and H10N 35/00 should be considered in order to perform a complete search.
N	H10N 30/80		Group H10N 30/80 is impacted by reclassification into group H10N 35/80. Groups H10N 30/80 and H10N 35/80 should be considered in order to perform a complete search.

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Type*	Location	Old Warning notice	New/Modified Warning notice
N	H10N 30/85		Group H10N 30/85 is impacted by reclassification into group H10N 35/85. Groups H10N 30/85 and H10N 35/85 should be considered in order to perform a complete search.
N	H10N 35/00		Group H10N 35/00 is incomplete pending reclassification of documents from group H10N 30/00. Groups H10N 30/00 and H10N 35/00 should be considered in order to perform a complete search.
N	H10N 35/80		Group H10N 35/80 is incomplete pending reclassification of documents from group H10N 30/80. Groups H10N 30/80 and H10N 35/80 should be considered in order to perform a complete search.
N	H10N 35/85		Group H10N 35/85 is incomplete pending reclassification of documents from group H10N 30/85. Groups H10N 30/85 and H10N 35/85 should be considered in order to perform a complete search.
N	H10N 39/00		Group H10N 39/00 is incomplete pending reclassification of documents from groups H01L 25/16, H01L 25/162, H01L 25/165, H01L 25/167 and H01L 25/18. All groups listed in this Warning should be considered in order to perform a complete search.
N	H10N 50/00		Group H10N 50/00 is impacted by reclassification into group H10N 50/20. Groups H10N 50/00 and H10N 50/20 should be considered in order to perform a complete search.
N	H10N 50/20		Group H10N 50/20 is incomplete pending reclassification of documents from group H10N 50/00. Groups H10N 50/00 and H10N 50/20 should be considered in order to perform a complete search.
N	H10N 50/85		Group H10N 50/85 is impacted by reclassification into group

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Type*	Location	Old Warning notice	New/Modified Warning notice
			H10N 52/85. Groups H10N 50/85 and H10N 52/85 should be considered in order to perform a complete search.
N	H10N 52/85		Group H10N 52/85 is incomplete pending reclassification of documents from group H10N 50/85. Groups H10N 50/85 and H10N 52/85 should be considered in order to perform a complete search.
N	H10N 59/00		Group H10N 59/00 is incomplete pending reclassification of documents from groups H01L 25/16, H01L 25/162, H01L 25/165, H01L 25/167 and H01L 25/18. Group H10N 59/00 is also impacted by reclassification into group H10B 61/00. All groups listed in this Warning should be considered in order to perform a complete search.
N	H10N 69/00		Group H10N 69/00 is incomplete pending reclassification of documents from groups H01L 25/16, H01L 25/162, H01L 25/165, H01L 25/167 and H01L 25/18. All groups listed in this Warning should be considered in order to perform a complete search.
N	H10N 79/00		Group H10N 79/00 is incomplete pending reclassification of documents from groups H01L 25/16, H01L 25/162, H01L 25/165, H01L 25/167, H01L 25/18 and H10B 63/00. All groups listed in this Warning should be considered in order to perform a complete search.
N	H10N 89/00		Group H10N 89/00 is incomplete pending reclassification of documents from groups H01L 25/16, H01L 25/162, H01L 25/165, H01L 25/167 and H01L 25/18. 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.

C. New, Modified or Deleted Note(s)

SUBCLASS H01L - SEMICONDUCTOR DEVICES; ELECTRIC SOLID STATE DEVICES NOT OTHERWISE PROVIDED FOR

Type*	Location	Old Note	New/Modified Note
D	H01L 39/00		Delete entire Note.
D	H01L 41/293		Delete entire Note.
D	H01L 41/297		Delete entire Note.

*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.

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

SUBCLASS H10N - ELECTRIC SOLID-STATE DEVICES NOT OTHERWISE PROVIDED FOR

Type*	Location	Old Guidance Heading	New/Modified Guidance Heading
N	H10N 10/00 - H10N 19/00		Thermoelectric or thermomagnetic devices
N	H10N 30/00 - H10N 39/00		Piezoelectric, electrostrictive or magnetostrictive devices
N	H10N 50/00 - H10N 59/00		Galvanomagnetic or similar magnetic-effect devices
N	H10N 60/00 - H10N 69/00		Superconducting devices
N	H10N 70/00 - H10N 79/00		Other electric solid-state devices

*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."

2. B. DEFINITIONS QUICK FIX

Symbol	Location of change (e.g., section title)	Existing reference symbol or text	Action; New symbol; New text
H01L 27/16			Delete entire definition
H01L 27/18			Delete entire definition
H01L 27/20			Delete entire definition
H01L 27/26			Delete entire definition
H01L 35/00			Delete entire definition
H01L 35/04			Delete entire definition
H01L 35/06			Delete entire definition
H01L 35/08			Delete entire definition
H01L 35/10			Delete entire definition
H01L 35/12			Delete entire definition
H01L 35/16			Delete entire definition
H01L 35/18			Delete entire definition
H01L 35/20			Delete entire definition
H01L 35/22			Delete entire definition
H01L 35/24			Delete entire definition
H01L 35/26			Delete entire definition
H01L 35/30			Delete entire definition
H01L 35/32			Delete entire definition
H01L 35/325			Delete entire definition
H01L 35/34			Delete entire definition
H01L 37/00			Delete entire definition
H01L 37/02			Delete entire definition
H01L 37/025			Delete entire definition
H01L 37/04			Delete entire definition
H01L 39/00			Delete entire definition
H01L 39/02			Delete entire definition
H01L 39/10			Delete entire definition
H01L 39/12			Delete entire definition
H01L 39/128			Delete entire definition
H01L 39/16			Delete entire definition
H01L 39/20			Delete entire definition
H01L 39/2403			Delete entire definition
H01L 39/2451			Delete entire definition
H01L 39/2477			Delete entire definition
H01L 39/248			Delete entire definition
H01L 41/00			Delete entire definition
H01L 41/04			Delete entire definition
H01L 41/06			Delete entire definition
H01L 41/16			Delete entire definition
H01L 41/18			Delete entire definition

H01L 41/183			Delete entire definition
H01L 41/20			Delete entire definition
H01L 41/22			Delete entire definition
H01L 41/23			Delete entire definition
H01L 41/27			Delete entire definition
H01L 41/29			Delete entire definition
H01L 41/293			Delete entire definition
H01L 41/297			Delete entire definition
H01L 41/31			Delete entire definition
H01L 41/311			Delete entire definition
H01L 41/39			Delete entire definition
H01L 41/47			Delete entire definition
H01L 43/00			Delete entire definition
H01L 43/02			Delete entire definition
H01L 43/10			Delete entire definition
H01L 45/00			Delete entire definition
H01L 45/04			Delete entire definition
H01L 47/00			Delete entire definition
H01L 49/00			Delete entire definition

NOTES:
- The table above is used for corrections or modifications to existing definitions, e.g. delete an entire definition or part thereof; propose new wording or modify wording of a section, change the symbol the definition is associated with, change or delete a reference symbol, etc.
- Do not delete (F) symbol definitions.

3.   REVISION CONCORDANCE LIST (RCL)

Type*	From CPC Symbol (existing)	To CPC Symbol(s)
D	H01L 27/16	<administrative transfer to H10N 19/00>
D	H01L 27/18	<administrative transfer to H10N 69/00>
D	H01L 27/20	<administrative transfer to H10N 39/00>
D	H01L 27/26	<administrative transfer to H10N 89/00>
D	H01L 27/265	<administrative transfer to H10N 89/02>
D	H01L 35/00	<administrative transfer to H10N 10/00>
D	H01L 35/02	<administrative transfer to H10N 10/80>
D	H01L 35/04	<administrative transfer to H10N 10/81>
D	H01L 35/06	<administrative transfer to H10N 10/813>
D	H01L 35/08	<administrative transfer to H10N 10/817>
D	H01L 35/10	<administrative transfer to H10N 10/82>
D	H01L 35/12	<administrative transfer to H10N 10/85>
D	H01L 35/14	<administrative transfer to H10N 10/851>
D	H01L 35/16	<administrative transfer to H10N 10/852>
D	H01L 35/18	<administrative transfer to H10N 10/853>
D	H01L 35/20	<administrative transfer to H10N 10/854>
D	H01L 35/22	<administrative transfer to H10N 10/855>
D	H01L 35/225	<administrative transfer to H10N 10/8552>
D	H01L 35/24	<administrative transfer to H10N 10/856>
D	H01L 35/26	<administrative transfer to H10N 10/857>
D	H01L 35/28	<administrative transfer to H10N 10/10>
D	H01L 35/30	<administrative transfer to H10N 10/13>
D	H01L 35/32	<administrative transfer to H10N 10/17>
D	H01L 35/325	<administrative transfer to H10N 19/101>
D	H01L 35/34	<administrative transfer to H10N 10/01>
D	H01L 37/00	<administrative transfer to H10N 15/00>
D	H01L 37/02	<administrative transfer to H10N 15/10>
D	H01L 37/025	<administrative transfer to H10N 15/15>
D	H01L 37/04	<administrative transfer to H10N 15/20>
D	H01L 39/00	<administrative transfer to H10N 60/00>
D	H01L 39/005	<administrative transfer to H10N 60/99>
D	H01L 39/02	<administrative transfer to H10N 60/80>
D	H01L 39/025	<administrative transfer to H10N 60/805>
D	H01L 39/04	<administrative transfer to H10N 60/81>
D	H01L 39/045	<administrative transfer to H10N 60/815>
D	H01L 39/06	<administrative transfer to H10N 60/82>
D	H01L 39/08	<administrative transfer to H10N 60/83>
D	H01L 39/10	<administrative transfer to H10N 60/84>
D	H01L 39/12	<administrative transfer to H10N 60/85>
D	H01L 39/121	<administrative transfer to H10N 60/851>
D	H01L 39/123	<administrative transfer to H10N 60/853>
D	H01L 39/125	<administrative transfer to H10N 60/855>
D	H01L 39/126	<administrative transfer to H10N 60/857>
D	H01L 39/128	<administrative transfer to H10N 60/858>
D	H01L 39/14	<administrative transfer to H10N 60/20>

Type*	From CPC Symbol (existing)	To CPC Symbol(s)
D	H01L 39/141	<administrative transfer to H10N 60/202>
D	H01L 39/143	<administrative transfer to H10N 60/203>
D	H01L 39/145	<administrative transfer to H10N 60/205>
D	H01L 39/146	<administrative transfer to H10N 60/207>
D	H01L 39/148	<administrative transfer to H10N 60/208>
D	H01L 39/16	<administrative transfer to H10N 60/30>
D	H01L 39/18	<administrative transfer to H10N 60/35>
D	H01L 39/20	<administrative transfer to H10N 60/355>
D	H01L 39/22	<administrative transfer to H10N 60/10>
D	H01L 39/221	<administrative transfer to H10N 60/11>
D	H01L 39/223	<administrative transfer to H10N 60/12>
D	H01L 39/225	<administrative transfer to H10N 60/124>
D	H01L 39/226	<administrative transfer to H10N 60/126>
D	H01L 39/228	<administrative transfer to H10N 60/128>
D	H01L 39/24	<administrative transfer to H10N 60/01>
D	H01L 39/2403	<administrative transfer to H10N 60/0128>
D	H01L 39/2406	<administrative transfer to H10N 60/0156>
D	H01L 39/2409	<administrative transfer to H10N 60/0184>
D	H01L 39/2412	<administrative transfer to H10N 60/0212>
D	H01L 39/2416	<administrative transfer to H10N 60/0241>
D	H01L 39/2419	<administrative transfer to H10N 60/0268>
D	H01L 39/2422	<administrative transfer to H10N 60/0296>
D	H01L 39/2425	<administrative transfer to H10N 60/0324>
D	H01L 39/2429	<administrative transfer to H10N 60/0352>
D	H01L 39/2432	<administrative transfer to H10N 60/0381>
D	H01L 39/2435	<administrative transfer to H10N 60/0408>
D	H01L 39/2438	<administrative transfer to H10N 60/0436>
D	H01L 39/2441	<administrative transfer to H10N 60/0464>
D	H01L 39/2445	<administrative transfer to H10N 60/0492>
D	H01L 39/2448	<administrative transfer to H10N 60/0521>
D	H01L 39/2451	<administrative transfer to H10N 60/0548>
D	H01L 39/2454	<administrative transfer to H10N 60/0576>
D	H01L 39/2458	<administrative transfer to H10N 60/0604>
D	H01L 39/2461	<administrative transfer to H10N 60/0632>
D	H01L 39/2464	<administrative transfer to H10N 60/0661>
D	H01L 39/2467	<administrative transfer to H10N 60/0688>
D	H01L 39/247	<administrative transfer to H10N 60/0716>
D	H01L 39/2474	<administrative transfer to H10N 60/0744>
D	H01L 39/2477	<administrative transfer to H10N 60/0772>
D	H01L 39/248	<administrative transfer to H10N 60/0801>
D	H01L 39/2483	<administrative transfer to H10N 60/0828>
D	H01L 39/2487	<administrative transfer to H10N 60/0856>
D	H01L 39/249	<administrative transfer to H10N 60/0884>
D	H01L 39/2493	<administrative transfer to H10N 60/0912>
D	H01L 39/2496	<administrative transfer to H10N 60/0941>
D	H01L 41/00	<administrative transfer to H10N 30/00>
D	H01L 41/02	<administrative transfer to H10N 30/80>
D	H01L 41/04	<administrative transfer to H10N 30/80>
D	H01L 41/042	<administrative transfer to H10N 30/802>

Type*	From CPC Symbol (existing)	To CPC Symbol(s)
D	H01L 41/044	<administrative transfer to H10N 30/804>
D	H01L 41/047	<administrative transfer to H10N 30/87>
D	H01L 41/0471	<administrative transfer to H10N 30/871>
D	H01L 41/0472	<administrative transfer to H10N 30/872>
D	H01L 41/0474	<administrative transfer to H10N 30/874>
D	H01L 41/0475	<administrative transfer to H10N 30/875>
D	H01L 41/0477	<administrative transfer to H10N 30/877>
D	H01L 41/0478	<administrative transfer to H10N 30/878>
D	H01L 41/053	<administrative transfer to H10N 30/88>
D	H01L 41/0533	<administrative transfer to H10N 30/883>
D	H01L 41/0536	<administrative transfer to H10N 30/886>
D	H01L 41/06	<administrative transfer to H10N 35/80>
D	H01L 41/08	<administrative transfer to H10N 30/00>
D	H01L 41/0805	<administrative transfer to H10N 30/1051>
D	H01L 41/081	<administrative transfer to H10N 30/10513>
D	H01L 41/0815	<administrative transfer to H10N 30/10516>
D	H01L 41/082	<administrative transfer to H10N 30/1061>
D	H01L 41/0825	<administrative transfer to H10N 30/1071>
D	H01L 41/083	<administrative transfer to H10N 30/50>
D	H01L 41/0831	<administrative transfer to H10N 30/501>
D	H01L 41/0833	<administrative transfer to H10N 30/503>
D	H01L 41/0835	<administrative transfer to H10N 30/505>
D	H01L 41/0836	<administrative transfer to H10N 30/506>
D	H01L 41/0838	<administrative transfer to H10N 30/508>
D	H01L 41/087	<administrative transfer to H10N 30/60>
D	H01L 41/09	<administrative transfer to H10N 30/20>
D	H01L 41/0906	<administrative transfer to H10N 30/202>
D	H01L 41/0913	<administrative transfer to H10N 30/2023>
D	H01L 41/092	<administrative transfer to H10N 30/2027>
D	H01L 41/0926	<administrative transfer to H10N 30/204>
D	H01L 41/0933	<administrative transfer to H10N 30/2041>
D	H01L 41/094	<administrative transfer to H10N 30/2042>
D	H01L 41/0946	<administrative transfer to H10N 30/2043>
D	H01L 41/0953	<administrative transfer to H10N 30/2044>
D	H01L 41/096	<administrative transfer to H10N 30/2045>
D	H01L 41/0966	<administrative transfer to H10N 30/2046>
D	H01L 41/0973	<administrative transfer to H10N 30/2047>
D	H01L 41/098	<administrative transfer to H10N 30/2048>
D	H01L 41/0986	<administrative transfer to H10N 30/206>
D	H01L 41/0993	<administrative transfer to H10N 30/208>
D	H01L 41/107	<administrative transfer to H10N 30/40>
D	H01L 41/113	<administrative transfer to H10N 30/30>
D	H01L 41/1132	<administrative transfer to H10N 30/302>
D	H01L 41/1134	<administrative transfer to H10N 30/304>
D	H01L 41/1136	<administrative transfer to H10N 30/306>
D	H01L 41/1138	<administrative transfer to H10N 30/308>
D	H01L 41/12	<administrative transfer to H10N 35/00>
D	H01L 41/125	<administrative transfer to H10N 35/101>
D	H01L 41/16	<administrative transfer to H10N 30/85>

Type*	From CPC Symbol (existing)	To CPC Symbol(s)
D	H01L 41/18	<administrative transfer to H10N 30/85>
D	H01L 41/183	<administrative transfer to H10N 30/852>
D	H01L 41/187	<administrative transfer to H10N 30/853>
D	H01L 41/1871	<administrative transfer to H10N 30/8536>
D	H01L 41/1873	<administrative transfer to H10N 30/8542>
D	H01L 41/1875	<administrative transfer to H10N 30/8548>
D	H01L 41/1876	<administrative transfer to H10N 30/8554>
D	H01L 41/1878	<administrative transfer to H10N 30/8561>
D	H01L 41/193	<administrative transfer to H10N 30/857>
D	H01L 41/20	<administrative transfer to H10N 35/85>
D	H01L 41/22	<administrative transfer to H10N 30/01>
D	H01L 41/23	<administrative transfer to H10N 30/02>
D	H01L 41/25	<administrative transfer to H10N 30/03>
D	H01L 41/253	<administrative transfer to H10N 30/04>
D	H01L 41/257	<administrative transfer to H10N 30/045>
D	H01L 41/27	<administrative transfer to H10N 30/05>
D	H01L 41/273	<administrative transfer to H10N 30/053>
D	H01L 41/277	<administrative transfer to H10N 30/057>
D	H01L 41/29	<administrative transfer to H10N 30/06>
D	H01L 41/293	<administrative transfer to H10N 30/063>
D	H01L 41/297	<administrative transfer to H10N 30/067>
D	H01L 41/31	<administrative transfer to H10N 30/07>
D	H01L 41/311	<administrative transfer to H10N 30/071>
D	H01L 41/312	<administrative transfer to H10N 30/072>
D	H01L 41/313	<administrative transfer to H10N 30/073>
D	H01L 41/314	<administrative transfer to H10N 30/074>
D	H01L 41/316	<administrative transfer to H10N 30/076>
D	H01L 41/317	<administrative transfer to H10N 30/077>
D	H01L 41/318	<administrative transfer to H10N 30/078>
D	H01L 41/319	<administrative transfer to H10N 30/079>
D	H01L 41/33	<administrative transfer to H10N 30/08>
D	H01L 41/331	<administrative transfer to H10N 30/081>
D	H01L 41/332	<administrative transfer to H10N 30/082>
D	H01L 41/333	<administrative transfer to H10N 30/084>
D	H01L 41/335	<administrative transfer to H10N 30/085>
D	H01L 41/337	<administrative transfer to H10N 30/086>
D	H01L 41/338	<administrative transfer to H10N 30/088>
D	H01L 41/339	<administrative transfer to H10N 30/089>
D	H01L 41/35	<administrative transfer to H10N 30/09>
D	H01L 41/37	<administrative transfer to H10N 30/092>
D	H01L 41/39	<administrative transfer to H10N 30/093>
D	H01L 41/41	<administrative transfer to H10N 30/095>
D	H01L 41/43	<administrative transfer to H10N 30/097>
D	H01L 41/45	<administrative transfer to H10N 30/098>
D	H01L 41/47	<administrative transfer to H10N 35/01>
D	H01L 43/00	<administrative transfer to H10N 50/00>
D	H01L 43/02	<administrative transfer to H10N 50/80>
D	H01L 43/04	<administrative transfer to H10N 52/80>
D	H01L 43/06	<administrative transfer to H10N 52/00>

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Type*	From CPC Symbol (existing)	To CPC Symbol(s)
D	H01L 43/065	<administrative transfer to H10N 52/101>
D	H01L 43/08	<administrative transfer to H10N 50/10>
D	H01L 43/10	<administrative transfer to H10N 50/85>
D	H01L 43/12	<administrative transfer to H10N 50/01>
D	H01L 43/14	<administrative transfer to H10N 52/01>
D	H01L 45/00	<administrative transfer to H10N 70/00>
D	H01L 45/005	<administrative transfer to H10N 70/151>
D	H01L 45/02	<administrative transfer to H10N 70/10>
D	H01L 45/04	<administrative transfer to H10N 70/20>
D	H01L 45/06	<administrative transfer to H10N 70/231>
D	H01L 45/065	<administrative transfer to H10N 70/235>
D	H01L 45/08	<administrative transfer to H10N 70/24>
D	H01L 45/085	<administrative transfer to H10N 70/245>
D	H01L 45/10	<administrative transfer to H10N 70/25>
D	H01L 45/12	<administrative transfer to H10N 70/801>
D	H01L 45/1206	<administrative transfer to H10N 70/253>
D	H01L 45/1213	<administrative transfer to H10N 70/257>
D	H01L 45/122	<administrative transfer to H10N 70/821>
D	H01L 45/1226	<administrative transfer to H10N 70/823>
D	H01L 45/1233	<administrative transfer to H10N 70/826>
D	H01L 45/124	<administrative transfer to H10N 70/8265>
D	H01L 45/1246	<administrative transfer to H10N 70/828>
D	H01L 45/1253	<administrative transfer to H10N 70/841>
D	H01L 45/126	<administrative transfer to H10N 70/8413>
D	H01L 45/1266	<administrative transfer to H10N 70/8416>
D	H01L 45/1273	<administrative transfer to H10N 70/8418>
D	H01L 45/128	<administrative transfer to H10N 70/861>
D	H01L 45/1286	<administrative transfer to H10N 70/8613>
D	H01L 45/1293	<administrative transfer to H10N 70/8616>
D	H01L 45/14	<administrative transfer to H10N 70/881>
D	H01L 45/141	<administrative transfer to H10N 70/882>
D	H01L 45/142	<administrative transfer to H10N 70/8822>
D	H01L 45/143	<administrative transfer to H10N 70/8825>
D	H01L 45/144	<administrative transfer to H10N 70/8828>
D	H01L 45/145	<administrative transfer to H10N 70/883>
D	H01L 45/146	<administrative transfer to H10N 70/8833>
D	H01L 45/147	<administrative transfer to H10N 70/8836>
D	H01L 45/148	<administrative transfer to H10N 70/884>
D	H01L 45/149	<administrative transfer to H10N 70/8845>
D	H01L 45/16	<administrative transfer to H10N 70/011>
D	H01L 45/1608	<administrative transfer to H10N 70/021>
D	H01L 45/1616	<administrative transfer to H10N 70/023>
D	H01L 45/1625	<administrative transfer to H10N 70/026>
D	H01L 45/1633	<administrative transfer to H10N 70/028>
D	H01L 45/1641	<administrative transfer to H10N 70/041>
D	H01L 45/165	<administrative transfer to H10N 70/043>
D	H01L 45/1658	<administrative transfer to H10N 70/046>
D	H01L 45/1666	<administrative transfer to H10N 70/061>
D	H01L 45/1675	<administrative transfer to H10N 70/063>

Type*	From CPC Symbol (existing)	To CPC Symbol(s)
D	H01L 45/1683	<administrative transfer to H10N 70/066>
D	H01L 45/1691	<administrative transfer to H10N 70/068>
D	H01L 47/00	<administrative transfer to H10N 80/00>
D	H01L 47/005	<administrative transfer to H10N 80/01>
D	H01L 47/02	<administrative transfer to H10N 80/10>
D	H01L 47/023	<administrative transfer to H10N 80/103>
D	H01L 47/026	<administrative transfer to H10N 80/107>
D	H01L 49/00	<administrative transfer to H10N 99/00>
D	H01L 49/003	<administrative transfer to H10N 99/03>
D	H01L 49/006	<administrative transfer to H10N 99/05>
D	H01L 49/02	<administrative transfer to H10N 97/00>
Q	H10N 10/855	H10N 10/855, H10N 10/8556
Q	H10N 30/00	H10N 30/00, H10N 35/00
Q	H10N 30/80	H10N 30/80, H10N 35/80
Q	H10N 30/85	H10N 30/85, H10N 35/85
Q	H10N 50/00	H10N 50/00, H10N 50/20
Q	H10N 50/85	H10N 50/85, H10N 52/85
Q	H10N 59/00	H10N 59/00, H10B 61/00

* 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***
H01L 27/16		DELETE
H01L 27/18		DELETE
H01L 27/20		DELETE
H01L 27/26		DELETE
H01L 27/265		DELETE
H01L 35/00		DELETE
H01L 35/02		DELETE
H01L 35/04		DELETE
H01L 35/06		DELETE
H01L 35/08		DELETE
H01L 35/10		DELETE
H01L 35/12		DELETE
H01L 35/14		DELETE
H01L 35/16		DELETE
H01L 35/18		DELETE
H01L 35/20		DELETE
H01L 35/22		DELETE
H01L 35/225		DELETE
H01L 35/24		DELETE
H01L 35/26		DELETE
H01L 35/28		DELETE
H01L 35/30		DELETE
H01L 35/32		DELETE
H01L 35/325		DELETE
H01L 35/34		DELETE
H01L 37/00		DELETE
H01L 37/02		DELETE
H01L 37/025		DELETE
H01L 37/04		DELETE
H01L 39/00		DELETE
H01L 39/005		DELETE
H01L 39/02		DELETE
H01L 39/025		DELETE
H01L 39/04		DELETE
H01L 39/045		DELETE
H01L 39/06		DELETE
H01L 39/08		DELETE
H01L 39/10		DELETE

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CPC	IPC	Action*
H01L 39/12		DELETE
H01L 39/121		DELETE
H01L 39/123		DELETE
H01L 39/125		DELETE
H01L 39/126		DELETE
H01L 39/128		DELETE
H01L 39/14		DELETE
H01L 39/141		DELETE
H01L 39/143		DELETE
H01L 39/145		DELETE
H01L 39/146		DELETE
H01L 39/148		DELETE
H01L 39/16		DELETE
H01L 39/18		DELETE
H01L 39/20		DELETE
H01L 39/22		DELETE
H01L 39/221		DELETE
H01L 39/223		DELETE
H01L 39/225		DELETE
H01L 39/226		DELETE
H01L 39/228		DELETE
H01L 39/24		DELETE
H01L 39/2403		DELETE
H01L 39/2406		DELETE
H01L 39/2409		DELETE
H01L 39/2412		DELETE
H01L 39/2416		DELETE
H01L 39/2419		DELETE
H01L 39/2422		DELETE
H01L 39/2425		DELETE
H01L 39/2429		DELETE
H01L 39/2432		DELETE
H01L 39/2435		DELETE
H01L 39/2438		DELETE
H01L 39/2441		DELETE
H01L 39/2445		DELETE
H01L 39/2448		DELETE
H01L 39/2451		DELETE
H01L 39/2454		DELETE
H01L 39/2458		DELETE
H01L 39/2461		DELETE
H01L 39/2464		DELETE
H01L 39/2467		DELETE
H01L 39/247		DELETE

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CPC	IPC	Action*
H01L 39/2474		DELETE
H01L 39/2477		DELETE
H01L 39/248		DELETE
H01L 39/2483		DELETE
H01L 39/2487		DELETE
H01L 39/249		DELETE
H01L 39/2493		DELETE
H01L 39/2496		DELETE
H01L 41/00		DELETE
H01L 41/02		DELETE
H01L 41/04		DELETE
H01L 41/042		DELETE
H01L 41/044		DELETE
H01L 41/047		DELETE
H01L 41/0471		DELETE
H01L 41/0472		DELETE
H01L 41/0474		DELETE
H01L 41/0475		DELETE
H01L 41/0477		DELETE
H01L 41/0478		DELETE
H01L 41/053		DELETE
H01L 41/0533		DELETE
H01L 41/0536		DELETE
H01L 41/06		DELETE
H01L 41/08		DELETE
H01L 41/0805		DELETE
H01L 41/081		DELETE
H01L 41/0815		DELETE
H01L 41/082		DELETE
H01L 41/0825		DELETE
H01L 41/083		DELETE
H01L 41/0831		DELETE
H01L 41/0833		DELETE
H01L 41/0835		DELETE
H01L 41/0836		DELETE
H01L 41/0838		DELETE
H01L 41/087		DELETE
H01L 41/09		DELETE
H01L 41/0906		DELETE
H01L 41/0913		DELETE
H01L 41/092		DELETE
H01L 41/0926		DELETE
H01L 41/0933		DELETE
H01L 41/094		DELETE

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CPC	IPC	Action*
H01L 41/0946		DELETE
H01L 41/0953		DELETE
H01L 41/096		DELETE
H01L 41/0966		DELETE
H01L 41/0973		DELETE
H01L 41/098		DELETE
H01L 41/0986		DELETE
H01L 41/0993		DELETE
H01L 41/107		DELETE
H01L 41/113		DELETE
H01L 41/1132		DELETE
H01L 41/1134		DELETE
H01L 41/1136		DELETE
H01L 41/1138		DELETE
H01L 41/12		DELETE
H01L 41/125		DELETE
H01L 41/16		DELETE
H01L 41/18		DELETE
H01L 41/183		DELETE
H01L 41/187		DELETE
H01L 41/1871		DELETE
H01L 41/1873		DELETE
H01L 41/1875		DELETE
H01L 41/1876		DELETE
H01L 41/1878		DELETE
H01L 41/193		DELETE
H01L 41/20		DELETE
H01L 41/22		DELETE
H01L 41/23		DELETE
H01L 41/25		DELETE
H01L 41/253		DELETE
H01L 41/257		DELETE
H01L 41/27		DELETE
H01L 41/273		DELETE
H01L 41/277		DELETE
H01L 41/29		DELETE
H01L 41/293		DELETE
H01L 41/297		DELETE
H01L 41/31		DELETE
H01L 41/311		DELETE
H01L 41/312		DELETE
H01L 41/313		DELETE
H01L 41/314		DELETE
H01L 41/316		DELETE

CPC	IPC	Action*
H01L 41/317		DELETE
H01L 41/318		DELETE
H01L 41/319		DELETE
H01L 41/33		DELETE
H01L 41/331		DELETE
H01L 41/332		DELETE
H01L 41/333		DELETE
H01L 41/335		DELETE
H01L 41/337		DELETE
H01L 41/338		DELETE
H01L 41/339		DELETE
H01L 41/35		DELETE
H01L 41/37		DELETE
H01L 41/39		DELETE
H01L 41/41		DELETE
H01L 41/43		DELETE
H01L 41/45		DELETE
H01L 41/47		DELETE
H01L 43/00		DELETE
H01L 43/02		DELETE
H01L 43/04		DELETE
H01L 43/06		DELETE
H01L 43/065		DELETE
H01L 43/08		DELETE
H01L 43/10		DELETE
H01L 43/12		DELETE
H01L 43/14		DELETE
H01L 45/00		DELETE
H01L 45/005		DELETE
H01L 45/02		DELETE
H01L 45/04		DELETE
H01L 45/06		DELETE
H01L 45/065		DELETE
H01L 45/08		DELETE
H01L 45/085		DELETE
H01L 45/10		DELETE
H01L 45/12		DELETE
H01L 45/1206		DELETE
H01L 45/1213		DELETE
H01L 45/122		DELETE
H01L 45/1226		DELETE
H01L 45/1233		DELETE
H01L 45/124		DELETE
H01L 45/1246		DELETE

CPC	IPC	Action*
H01L 45/1253		DELETE
H01L 45/126		DELETE
H01L 45/1266		DELETE
H01L 45/1273		DELETE
H01L 45/128		DELETE
H01L 45/1286		DELETE
H01L 45/1293		DELETE
H01L 45/14		DELETE
H01L 45/141		DELETE
H01L 45/142		DELETE
H01L 45/143		DELETE
H01L 45/144		DELETE
H01L 45/145		DELETE
H01L 45/146		DELETE
H01L 45/147		DELETE
H01L 45/148		DELETE
H01L 45/149		DELETE
H01L 45/16		DELETE
H01L 45/1608		DELETE
H01L 45/1616		DELETE
H01L 45/1625		DELETE
H01L 45/1633		DELETE
H01L 45/1641		DELETE
H01L 45/165		DELETE
H01L 45/1658		DELETE
H01L 45/1666		DELETE
H01L 45/1675		DELETE
H01L 45/1683		DELETE
H01L 45/1691		DELETE
H01L 47/00		DELETE
H01L 47/005		DELETE
H01L 47/02		DELETE
H01L 47/023		DELETE
H01L 47/026		DELETE
H01L 49/00		DELETE
H01L 49/003		DELETE
H01L 49/006		DELETE
H01L 49/02		DELETE
H10N 10/00	H10N 10/00	NEW
H10N 10/01	H10N 10/01	NEW
H10N 10/10	H10N 10/10	NEW
H10N 10/13	H10N 10/13	NEW
H10N 10/17	H10N 10/17	NEW
H10N 10/80	H10N 10/80	NEW

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CPC	IPC	Action*
H10N 10/81	H10N 10/81	NEW
H10N 10/813	H10N 10/813	NEW
H10N 10/817	H10N 10/817	NEW
H10N 10/82	H10N 10/82	NEW
H10N 10/85	H10N 10/85	NEW
H10N 10/851	H10N 10/851	NEW
H10N 10/852	H10N 10/852	NEW
H10N 10/853	H10N 10/853	NEW
H10N 10/854	H10N 10/854	NEW
H10N 10/855	H10N 10/855	NEW
H10N 10/8552	H10N 10/855	NEW
H10N 10/8556	H10N 10/851	NEW
H10N 10/856	H10N 10/856	NEW
H10N 10/857	H10N 10/857	NEW
H10N 15/00	H10N 15/00	NEW
H10N 15/10	H10N 15/10	NEW
H10N 15/15	H10N 15/10	NEW
H10N 15/20	H10N 15/20	NEW
H10N 19/00	H10N 19/00	NEW
H10N 19/101	H10N 19/00	NEW
H10N 30/00	H10N 30/00	NEW
H10N 30/01	H10N 30/01	NEW
H10N 30/02	H10N 30/02	NEW
H10N 30/03	H10N 30/03	NEW
H10N 30/04	H10N 30/04	NEW
H10N 30/045	H10N 30/045	NEW
H10N 30/05	H10N 30/05	NEW
H10N 30/053	H10N 30/053	NEW
H10N 30/057	H10N 30/057	NEW
H10N 30/06	H10N 30/06	NEW
H10N 30/063	H10N 30/063	NEW
H10N 30/067	H10N 30/067	NEW
H10N 30/07	H10N 30/07	NEW
H10N 30/071	H10N 30/071	NEW
H10N 30/072	H10N 30/072	NEW
H10N 30/073	H10N 30/073	NEW
H10N 30/074	H10N 30/074	NEW
H10N 30/076	H10N 30/076	NEW
H10N 30/077	H10N 30/077	NEW
H10N 30/078	H10N 30/078	NEW
H10N 30/079	H10N 30/079	NEW
H10N 30/08	H10N 30/08	NEW
H10N 30/081	H10N 30/081	NEW
H10N 30/082	H10N 30/082	NEW

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CPC	IPC	Action*
H10N 30/084	H10N 30/084	NEW
H10N 30/085	H10N 30/085	NEW
H10N 30/086	H10N 30/086	NEW
H10N 30/088	H10N 30/088	NEW
H10N 30/089	H10N 30/089	NEW
H10N 30/09	H10N 30/09	NEW
H10N 30/092	H10N 30/092	NEW
H10N 30/093	H10N 30/093	NEW
H10N 30/095	H10N 30/095	NEW
H10N 30/097	H10N 30/097	NEW
H10N 30/098	H10N 30/098	NEW
H10N 30/1051	H10N 30/00	NEW
H10N 30/10513	H10N 30/00	NEW
H10N 30/10516	H10N 30/00	NEW
H10N 30/1061	H10N 30/00	NEW
H10N 30/1071	H10N 30/00	NEW
H10N 30/20	H10N 30/20	NEW
H10N 30/202	H10N 30/20	NEW
H10N 30/2023	H10N 30/20	NEW
H10N 30/2027	H10N 30/20	NEW
H10N 30/204	H10N 30/20	NEW
H10N 30/2041	H10N 30/20	NEW
H10N 30/2042	H10N 30/20	NEW
H10N 30/2043	H10N 30/20	NEW
H10N 30/2044	H10N 30/20	NEW
H10N 30/2045	H10N 30/20	NEW
H10N 30/2046	H10N 30/20	NEW
H10N 30/2047	H10N 30/20	NEW
H10N 30/2048	H10N 30/20	NEW
H10N 30/206	H10N 30/20	NEW
H10N 30/208	H10N 30/20	NEW
H10N 30/30	H10N 30/30	NEW
H10N 30/302	H10N 30/30	NEW
H10N 30/304	H10N 30/30	NEW
H10N 30/306	H10N 30/30	NEW
H10N 30/308	H10N 30/30	NEW
H10N 30/40	H10N 30/40	NEW
H10N 30/50	H10N 30/50	NEW
H10N 30/501	H10N 30/50	NEW
H10N 30/503	H10N 30/50	NEW
H10N 30/505	H10N 30/50	NEW
H10N 30/506	H10N 30/50	NEW
H10N 30/508	H10N 30/50	NEW
H10N 30/60	H10N 30/60	NEW

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CPC	IPC	Action*
H10N 30/80	H10N 30/80	NEW
H10N 30/802	H10N 30/80	NEW
H10N 30/804	H10N 30/80	NEW
H10N 30/85	H10N 30/85	NEW
H10N 30/852	H10N 30/85	NEW
H10N 30/853	H10N 30/853	NEW
H10N 30/8536	H10N 30/853	NEW
H10N 30/8542	H10N 30/853	NEW
H10N 30/8548	H10N 30/853	NEW
H10N 30/8554	H10N 30/853	NEW
H10N 30/8561	H10N 30/853	NEW
H10N 30/857	H10N 30/857	NEW
H10N 30/87	H10N 30/87	NEW
H10N 30/871	H10N 30/87	NEW
H10N 30/872	H10N 30/87	NEW
H10N 30/874	H10N 30/87	NEW
H10N 30/875	H10N 30/87	NEW
H10N 30/877	H10N 30/87	NEW
H10N 30/878	H10N 30/87	NEW
H10N 30/88	H10N 30/88	NEW
H10N 30/883	H10N 30/88	NEW
H10N 30/886	H10N 30/88	NEW
H10N 35/00	H10N 35/00	NEW
H10N 35/01	H10N 35/01	NEW
H10N 35/101	H10N 35/00	NEW
H10N 35/80	H10N 35/80	NEW
H10N 35/85	H10N 35/85	NEW
H10N 39/00	H10N 39/00	NEW
H10N 50/00	H10N 50/00	NEW
H10N 50/01	H10N 50/01	NEW
H10N 50/10	H10N 50/10	NEW
H10N 50/20	H10N 50/20	NEW
H10N 50/80	H10N 50/80	NEW
H10N 50/85	H10N 50/85	NEW
H10N 52/00	H10N 52/00	NEW
H10N 52/01	H10N 52/01	NEW
H10N 52/101	H10N 52/00	NEW
H10N 52/80	H10N 52/80	NEW
H10N 52/85	H10N 52/85	NEW
H10N 59/00	H10N 59/00	NEW
H10N 60/00	H10N 60/00	NEW
H10N 60/01	H10N 60/01	NEW
H10N 60/0128	H10N 60/01	NEW
H10N 60/0156	H10N 60/01	NEW

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CPC	IPC	Action*
H10N 60/0184	H10N 60/01	NEW
H10N 60/0212	H10N 60/01	NEW
H10N 60/0241	H10N 60/01	NEW
H10N 60/0268	H10N 60/01	NEW
H10N 60/0296	H10N 60/01	NEW
H10N 60/0324	H10N 60/01	NEW
H10N 60/0352	H10N 60/01	NEW
H10N 60/0381	H10N 60/01	NEW
H10N 60/0408	H10N 60/01	NEW
H10N 60/0436	H10N 60/01	NEW
H10N 60/0464	H10N 60/01	NEW
H10N 60/0492	H10N 60/01	NEW
H10N 60/0521	H10N 60/01	NEW
H10N 60/0548	H10N 60/01	NEW
H10N 60/0576	H10N 60/01	NEW
H10N 60/0604	H10N 60/01	NEW
H10N 60/0632	H10N 60/01	NEW
H10N 60/0661	H10N 60/01	NEW
H10N 60/0688	H10N 60/01	NEW
H10N 60/0716	H10N 60/01	NEW
H10N 60/0744	H10N 60/01	NEW
H10N 60/0772	H10N 60/01	NEW
H10N 60/0801	H10N 60/01	NEW
H10N 60/0828	H10N 60/01	NEW
H10N 60/0856	H10N 60/01	NEW
H10N 60/0884	H10N 60/01	NEW
H10N 60/0912	H10N 60/01	NEW
H10N 60/0941	H10N 60/01	NEW
H10N 60/10	H10N 60/10	NEW
H10N 60/11	H10N 60/10	NEW
H10N 60/12	H10N 60/12	NEW
H10N 60/124	H10N 60/12	NEW
H10N 60/126	H10N 60/12	NEW
H10N 60/128	H10N 60/10	NEW
H10N 60/20	H10N 60/20	NEW
H10N 60/202	H10N 60/20	NEW
H10N 60/203	H10N 60/20	NEW
H10N 60/205	H10N 60/20	NEW
H10N 60/207	H10N 60/20	NEW
H10N 60/208	H10N 60/20	NEW
H10N 60/30	H10N 60/30	NEW
H10N 60/35	H10N 60/35	NEW
H10N 60/355	H10N 60/355	NEW
H10N 60/80	H10N 60/80	NEW

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CPC	IPC	Action*
H10N 60/805	H10N 60/80	NEW
H10N 60/81	H10N 60/81	NEW
H10N 60/815	H10N 60/81	NEW
H10N 60/82	H10N 60/82	NEW
H10N 60/83	H10N 60/83	NEW
H10N 60/84	H10N 60/84	NEW
H10N 60/85	H10N 60/85	NEW
H10N 60/851	H10N 60/85	NEW
H10N 60/853	H10N 60/85	NEW
H10N 60/855	H10N 60/85	NEW
H10N 60/857	H10N 60/85	NEW
H10N 60/858	H10N 60/85	NEW
H10N 60/99	H10N 60/00	NEW
H10N 69/00	H10N 69/00	NEW
H10N 70/00	H10N 70/00	NEW
H10N 70/011	H10N 70/00	NEW
H10N 70/021	H10N 70/00	NEW
H10N 70/023	H10N 70/00	NEW
H10N 70/026	H10N 70/00	NEW
H10N 70/028	H10N 70/00	NEW
H10N 70/041	H10N 70/00	NEW
H10N 70/043	H10N 70/00	NEW
H10N 70/046	H10N 70/00	NEW
H10N 70/061	H10N 70/00	NEW
H10N 70/063	H10N 70/00	NEW
H10N 70/066	H10N 70/00	NEW
H10N 70/068	H10N 70/00	NEW
H10N 70/10	H10N 70/10	NEW
H10N 70/151	H10N 70/00	NEW
H10N 70/20	H10N 70/20	NEW
H10N 70/231	H10N 70/20	NEW
H10N 70/235	H10N 70/20	NEW
H10N 70/24	H10N 70/20	NEW
H10N 70/245	H10N 70/20	NEW
H10N 70/25	H10N 70/20	NEW
H10N 70/253	H10N 70/20	NEW
H10N 70/257	H10N 70/20	NEW
H10N 70/801	H10N 70/00	NEW
H10N 70/821	H10N 70/00	NEW
H10N 70/823	H10N 70/00	NEW
H10N 70/826	H10N 70/00	NEW
H10N 70/8265	H10N 70/00	NEW
H10N 70/828	H10N 70/00	NEW
H10N 70/841	H10N 70/00	NEW

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CPC	IPC	Action*
H10N 70/8413	H10N 70/00	NEW
H10N 70/8416	H10N 70/00	NEW
H10N 70/8418	H10N 70/00	NEW
H10N 70/861	H10N 70/00	NEW
H10N 70/8613	H10N 70/00	NEW
H10N 70/8616	H10N 70/00	NEW
H10N 70/881	H10N 70/00	NEW
H10N 70/882	H10N 70/00	NEW
H10N 70/8822	H10N 70/00	NEW
H10N 70/8825	H10N 70/00	NEW
H10N 70/8828	H10N 70/00	NEW
H10N 70/883	H10N 70/00	NEW
H10N 70/8833	H10N 70/00	NEW
H10N 70/8836	H10N 70/00	NEW
H10N 70/884	H10N 70/00	NEW
H10N 70/8845	H10N 70/00	NEW
H10N 79/00	H10N 79/00	NEW
H10N 80/00	H10N 80/00	NEW
H10N 80/01	H10N 80/00	NEW
H10N 80/10	H10N 80/10	NEW
H10N 80/103	H10N 80/10	NEW
H10N 80/107	H10N 80/10	NEW
H10N 89/00	H10N 89/00	NEW
H10N 89/02	H10N 89/00	NEW
H10N 97/00	H10N 97/00	NEW
H10N 99/00	H10N 99/00	NEW
H10N 99/03	H10N 99/00	NEW
H10N 99/05	H10N 99/00	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 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.

5. CROSS-REFERENCE LIST (CRL)

Scheme references impacted by this revision project

Location of reference to be changed	Referenced subclass or group to be changed	Action; New reference symbol; New text
B06B1/06	H01L41/00	H10N30/00
B06B1/08	H01L41/00	H10N30/00
B23Q1/00	H01L41/09	H10N30/20
B60H1/00478	H01L35/00	H10N10/00
B81B	H01L41/00	H10N30/00
B81B3/0021	H01L41/00	H10N30/00
B81C	H01L41/22	H10N30/01
E05B47/0011	H01L41/00	H10N30/00
F02D41/2096	H01L41/042	H10N30/802
F16F15/005	H01L41/00	H10N30/00
G01L1/125	H01L41/125	H10N35/101
G01L3/102	H01L41/125	H10N35/101
G01N25/482	H01L35/00	H10N10/00
G01N25/482	H01L37/00	H10N15/00
G01R33/0052	H01L43/12	H10N50/85
G21D7/04	H01L35/00	H10N10/00
G21D7/04	H01L37/00	H10N15/00
H01C7/00	H01L39/00	H10N60/00
H01C7/00	H01L43/00	H10N50/00
H01C7/00	H01L45/00	H10N70/00
H01C7/00	H01L47/00	H10N80/00
H01F	H01L37/00	H10N15/00
H01F1/0036	H01L43/08	H10N50/10
H01F1/40	H01L43/00	H10N50/00
H01F6/003	H01L39/00	H10N60/00
H01F6/003	H01L39/20	H10N60/355
H01H33/004	H01L39/20	H10N60/355
H01L27/01 NOTE	In groups H01L 27/01 - H01L 27/26, in the absence of an indication to the contrary, classification is made in the last appropriate place.	Delete the entire NOTE.
H01L23/49877	H01L39/123	H10N60/853
H01L23/53276	H01L39/123	H10N60/853
H01L29/00	H01L47/00	H01L33/00
H02H9/044	H01L45/00	H10N70/00
H02N2/00	H01L41/00	H10N30/00
H02N15/04	H01L39/00	H10N60/00
H02S	H01L35/00	H10N10/00
H02S	H01L37/00	H10N15/00

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Location of reference to be changed	Referenced subclass or group to be changed	Action; New reference symbol; New text
H02S10/30	H01L35/00	H10N10/00
H03B5/32	H01L41/00	H10N30/00
H03B5/40	H01L41/00	H10N30/00
H03B15/003	H01L39/00	H10N60/00
H03F3/54	H01L45/02	H10N70/10
H03H9/00	H01L41/00	H10N30/00
H04R15/00	H01L41/00	H10N30/00
H04R17/00	H01L41/00	H10N30/00
H04R17/00	H01L41/00	H10N30/00

Definitions references impacted by this revision project

Location of reference to be changed	Referenced subclass or group to be changed	Section of definition	Action; New reference symbol; New text
A45D6/00	H01L41/042	Informative references	H10N30/802
A61B8/00	The preceding image includes references to A61B 5/00, A61B 8/00, A61B 6/00, G06T, G16H, G06F 18/00, G01S 15/8906, G01S 7/52017, G01N 29/00, B06B 1/00, G10K 11/00, H01L 41/00.	Relationship (2nd paragraph)	Replace: The text H01L41/00 with the following text: and H10N30/00
A61H2201/0285	H01L35/28	Informative references	H10N10/10
B06B	H01L41/00	Informative references	H10N30/00
B06B	H01L41/00	Relationship	H10N30/00
B22F	H01L39/12	Application-oriented references	H10N60/85
B22F	H01L35/20	Informative references	H10N10/854
B23Q1/00	H01L41/09	Limiting references	H10N30/20
B25J7/00	H01L41/00	Informative references	H10N30/00
B60C23/00	H01L41/113	Informative references	H10N30/30
B60H1/00478	H01L35/00	Informative references	H10N10/00

Location of reference to be changed	Referenced subclass or group to be changed	Section of definition	Action; New reference symbol; New text
B81B	Piezo-electric devices (includes rotary motors, actuators and sensors using a piezo-electric element) H01L41/00	Informative references	Replace with the following new reference: Piezo-electric devices (includes sensors using a piezo-electric element); Electro active polymer (EAP) actuated artificial muscles H10N30/00
B81B	Electro active polymer (EAP) actuated artificial muscles H01L41/00	Informative references	Replace with the following new reference: Electric machines using piezo-electric effect H02N 2/00
B81C	Piezo-electric devices (includes rotary motors, actuators and sensors using a piezo-electric element) H01L41/00	Informative references	Replace with the following new reference: Piezo-electric devices (includes sensors using a piezo-electric element); Electro active polymer (EAP) actuated artificial muscles H10N30/00
B81C	Electro active polymer (EAP) actuated artificial muscles H01L41/00	Informative references	Replace with the following new reference: Electric machines using piezo-electric effect H02N 2/00
C01G3/006	H01L39/00	Informative references	H10N60/00
C01G23/003	H01L39/00	Informative references	H10N60/00
C01G23/005	H01L39/00	Informative references	H10N60/00

Location of reference to be changed	Referenced subclass or group to be changed	Section of definition	Action; New reference symbol; New text
C01G23/006	H01L39/00	Informative references	H10N60/00
C04B35/00	H01L39/00	Informative references	H10N60/00
C04B35/00	H01L41/00	Informative references	H10N30/00
C04B35/45	H01L39/126	Informative references	H10N60/857
C04B35/45	H01L39/2419	Informative references	H10N60/0268
C04B35/45	H01L39/2419	Informative references	H10N60/0268
C04B35/46	H01L41/187	Informative references	H10N30/853
C04B35/472	H01L41/187	Informative references	H10N30/853
C04B35/49	H01L41/187	Informative references	H10N30/853
C04B35/491	H01L41/39	Informative references	H10N30/093
C04B35/495	H01L41/187	Informative references	H10N30/853
C04B35/58	H01L39/2416	Informative references	H10N60/0241
C04B35/58057	H01L39/141	Informative references	H10N60/202
C04B35/58057	H01L39/226	Informative references	H10N60/126
C04B35/58057	H01L39/2487	Informative references	H10N60/0856
C04B35/62254	H01L39/248	Informative references	H10N60/0801
C04B2235/96	H01L41/00	Special rules	H10N30/00
C09K	H01L41/16	References out of a residual place	H10N30/85
D06F58/206	H01L35/00	Informative references	H10N10/00
F01N5/00	H01L35/00	Informative references	H10N10/00
F02D41/2096	H01L41/042	Informative references	H10N30/802
F02M51/0603	H01L41/00	Limiting references	H10N30/00
F03G7/00	H01L35/28	Informative references	H10N10/10
F03G7/008	H01L41/00	Informative references	H10N30/00

Location of reference to be changed	Referenced subclass or group to be changed	Section of definition	Action; New reference symbol; New text
F03G7/008	H01L47/00	Informative references	H10N80/00
F03G7/0121	H01L41/00, H01L 41/08	Informative references	H10N30/00
F03G7/06	H01L35/00	Informative references	H10N10/00
F03G7/08	H01L41/00	Informative references	H10N30/00
F16K31/004	H01L41/00	Informative references	H10N30/00
F23Q3/00	H01L41/08	Informative references	H10N30/00
F24F5/0042	H01L35/00	Informative references	H10N10/00
F25B21/02	H01L35/00	Informative references	H10N10/00
F25B21/02	H01L37/00	Informative references	H10N15/00
F28D	H01L35/30	Limiting references	H10N10/13
G01C19/56	H01L41/00	Informative references	H10N30/00
G01H	H01L41/00	Informative references	H10N30/00
G01J	H01L35/00	Informative references	H10N10/00
G01J	H01L37/00	Informative references	H10N15/00
G01J5/12	H01L35/00	Informative references	H10N10/00
G01J5/12	H01L37/00	Informative references	H10N15/00
G01J5/12	H01L35/20	Informative references	H10N10/854
G01J5/12	H01L35/26	Informative references	H10N10/857
G01J5/12	H01L35/32	Informative references	H10N10/17
G01J5/20	H01L27/16	Informative references	H10N19/00
G01J5/34	H01L37/02	Informative references	H10N15/10
G01J5/44	H01L41/09	Informative references	H10N30/20
G01K	H01L35/00	Informative references	H10N10/00
G01K	H01L37/00	Informative references	H10N15/00

Location of reference to be changed	Referenced subclass or group to be changed	Section of definition	Action; New reference symbol; New text
G01K7/00	H01L35/28	Informative references	H10N10/10
G01K7/00	H01L37/00	Informative references	H10N15/00
G01K7/02	H01L35/00	Informative references	H10N10/00
G01K7/02	H01L37/00	Informative references	H10N15/00
G01L1/125	H01L41/12	Informative references	H10N35/00
G01L1/125	H01L41/125	Limiting references	H10N35/101
G01L3/102	H01L41/12	Informative references	H10N35/00
G01L3/102	H01L41/125	Limiting references	H10N35/101
G01N1/00	H01L37/00	Relationship	H10N15/00
G01R	H01L35/00	Informative references	H10N10/00
G01R	H01L37/00	Informative references	H10N15/00
G01R	H01L35/00	Informative references	H10N10/00
G01R	H01L37/00	Informative references	H10N15/00
G01R	H01L43/00	Informative references	H10N50/00
G01R15/202	H01L43/06	Informative references	H10N52/00
G01R21/08	H01L43/06	Informative references	H10N52/00
G01R29/22	H01L41/00	Informative references	H10N30/00
G01R33/035	H01L39/00	Informative references	H10N60/00
G01R33/06	H01L43/00	Informative references	H10N50/00
G04C3/00	H01L41/00	Special rules	H10N30/00
G06F3/016	H01L41/09	Informative references	H10N30/20
G06F3/0433	H01L41/09	Informative references	H10N30/20
G06N10/00	H01L39/00	Informative references	H10N60/00
G06N10/40	H01L39/00	Informative references	H10N60/00
G08G1/02	H01L41/00	Informative references	H10N30/00

Location of reference to be changed	Referenced subclass or group to be changed	Section of definition	Action; New reference symbol; New text
G08G1/02	H01L41/113	Informative references	H10N30/30
G09G3/346	H01L41/00	Informative references	H10N30/00
G10K	H01L41/00	Informative references	H10N30/00
G11B5/00	H01L43/00	Limiting references	H10N50/00
G11B5/00	H01L43/00	Special rules	H10N50/00
G11B5/127	H01L43/08	Informative references	H10N50/10
G11C	H01L45/00	Informative references	H10N70/00
G11C13/00	H01L45/04	Informative references	H10N70/20
G21D	H01L35/00	Informative references	H10N10/00
G21D	H01L37/00	Informative references	H10N15/00
G21H1/00	H01L35/00	Informative references	H10N10/00
G21H1/10	H01L35/00	Informative references	H10N10/00
H01B	H01L39/00	Application-oriented references	H10N60/00
H01B	H01L41/00	Informative references	H10N30/00
H01B1/00	H01L39/00	Informative references	H10N60/00
H01B3/00	H01L41/00	Informative references	H10N30/00
H01B12/00	H01L39/12	Informative references	H10N60/85
H01B12/00	H01L39/248	Informative references	H10N60/0801
H01C	H01L39/00	Informative references	H10N60/00
H01C	H01L45/00	Informative references	H10N70/00
H01C	H01L49/02	Informative references	H10N97/00
H01C	H01L47/00	Limiting references	H10N80/00
H01C	H01L43/08	Limiting references	H10N50/10
H01C7/00	H01L39/00	Informative references	H10N60/00

Location of reference to be changed	Referenced subclass or group to be changed	Section of definition	Action; New reference symbol; New text
H01C7/00	H01L45/00	Informative references	H10N70/00
H01C7/00	H01L43/00	Limiting references	H10N50/00
H01C7/00	H01L47/00	Limiting references	H10N80/00
H01F	H01L37/00	Informative references	H10N15/00
H01F	H01L41/12	Informative references	H10N35/00
H01F	H01L43/00	Informative references	H10N50/00
H01F6/00	H01L39/00	Limiting references	H10N60/00
H01F6/00	H01L39/16	Limiting references	H10N60/30
H01F7/00	H01L41/12	Informative references	H10N35/00
H01F10/00	H01L43/00	Informative references	H10N50/00
H01F10/00	H01L43/10	Informative references	H10N50/85
H01F10/324	H01L41/12	Informative references	H10N35/00
H01F10/324	H01L41/20	Informative references	H10N35/85
H01F17/00	H01L49/02	Informative references	H10N97/00
H01G	H01L49/02	Application-oriented references	H10N97/00
H01J45/00	H01L35/00	Limiting references	H10N10/00
H01J45/00	H01L37/00	Limiting references	H10N15/00
H01L21/77	H01L27/16	Informative references	H10N19/00
H01L21/77	H01L27/18	Informative references	H10N69/00
H01L21/77	H01L27/20	Informative references	H10N39/00
H01L21/77	H01L27/26	Informative references	H10N89/00
H01L23/00	H01L35/00	Limiting references	H10N10/00
H01L23/00	H01L37/00	Limiting references	H10N15/00
H01L23/00	H01L39/00	Limiting references	H10N60/00

Location of reference to be changed	Referenced subclass or group to be changed	Section of definition	Action; New reference symbol; New text
H01L23/00	H01L41/00	Limiting references	H10N30/00
H01L23/00	H01L43/00	Limiting references	H10N50/00
H01L23/00	H01L45/00	Limiting references	H10N70/00
H01L23/00	H01L47/00	Limiting references	H10N80/00
H01L23/00	H01L47/00	Limiting references	H10N80/00
H01L23/00	Details peculiar to solid state devices not provided for in groups H01L 27/00 - H01L 47/00 and H01L 51/00 and not provided for in any other subclass	Limiting references	Replace with the following text: Details peculiar to solid state devices not provided for in groups H01L 27/00 – H01L 33/00, H10B 10/00 – H10B 53/00, H10B 69/00, H10K 10/00, H10K 30/00, H10K 50/00, H10K 71/00, H10K 77/00, H10K 85/00 and H10K 99/00 and not provided for in any other subclass
H01L23/00	H01L49/00	Limiting references	H10N99/00
H01L23/49877	H01L39/123	Informative references	H10N60/853
H01L23/53276	H01L39/123	Informative references	H10N60/853
H01L24/00	H01L35/00	Limiting references	H10N10/00
H01L24/00	H01L37/00	Limiting references	H10N15/00
H01L24/00	H01L39/00	Limiting references	H10N60/00
H01L24/00	H01L41/00	Limiting references	H10N30/00
H01L24/00	H01L43/00	Limiting references	H10N50/00
H01L24/00	H01L45/00	Limiting references	H10N70/00
H01L24/00	H01L47/00	Limiting references	H10N80/00
H01L24/00	H01L47/00	Limiting references	H10N80/00

Location of reference to be changed	Referenced subclass or group to be changed	Section of definition	Action; New reference symbol; New text
H01L24/00	Details peculiar to solid state devices not provided for in groups H01L 27/00 - H01L 47/00 and H01L 51/00 and not provided for in any other subclass	Limiting references	Replace with the following text: Details peculiar to solid state devices not provided for in groups H01L 27/00 – H01L 33/00, H10B 10/00 – H10B 53/00, H10B 69/00, H10K 10/00, H10K 30/00, H10K 50/00, H10K 71/00, H10K 77/00, H10K 85/00 and H10K 99/00 and not provided for in any other subclass
H01L24/00	H01L49/00	Limiting references	H10N99/00
H01L29/00	H01L35/00	Limiting references	H10N10/00
H01L29/00	H01L37/00	Limiting references	H10N15/00
H01L29/00	H01L39/00	Limiting references	H10N60/00
H01L29/00	H01L41/00	Limiting references	H10N30/00
H01L29/00	H01L43/00	Limiting references	H10N50/00
H01L29/00	H01L45/00	Limiting references	H10N70/00
H01L29/00	H01L47/00	Limiting references	H10N80/00
H01L29/00	H01L47/00	Limiting references	H10N80/00

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H01L29/00	Solid state devices not provided for in groups H01L 27/00 - H01L 47/00 and H01L 51/00 and not provided for in any other subclass; Processes or apparatus peculiar to the manufacture or treatment thereof or of parts thereof	Limiting references	Replace with the following text: Details peculiar to solid state devices not provided for in groups H01L 27/00 – H01L 33/00, H10B 10/00 – H10B 53/00, H10B 69/00, H10K 10/00, H10K 30/00, H10K 50/00, H10K 71/00, H10K 77/00, H10K 85/00 and H10K 99/00 and not provided for in any other subclass
H01L29/00	H01L49/00	Limiting references	H10N99/00
H01L29/00	Details of semiconductor bodies or of electrodes of semiconductor components H01L31/00 - H01L47/00, H01S5/00, G01	References out of a residual place	Details of semiconductor bodies or of electrodes of semiconductor components H01L31/00 - H01L33/00, H10N10/00, H10N15/00, H10N30/00, H10N35/00, H10N50/00, H10N52/00, H10N60/00, H10N70/00, H10N80/00, H01S5/00, G01
H01L31/052	H01L35/28	Informative references	H10N10/10
H01L33/645	H01L27/16	Informative references	H10N19/00
H01L33/645	H01L35/00	Informative references	H10N10/00
H01L33/645	H01L37/00	Informative references	H10N15/00
H01M	H01L35/00	Informative references	H10N10/00
H01M	H01L37/00	Informative references	H10N15/00

Location of reference to be changed	Referenced subclass or group to be changed	Section of definition	Action; New reference symbol; New text
H01M6/00	H01L35/00	Informative references	H10N10/00
H01M6/36	H01L35/00	Informative references	H10N10/00
H01M6/36	H01L37/00	Informative references	H10N15/00
H01M8/00	H01L35/00	Informative references	H10N10/00
H01M8/00	H01L37/00	Informative references	H10N15/00
H02H9/00	H01L39/16, H01F/00	Informative references	H10N60/30, H01F6/00
H02M11/00	H01L41/00	Informative references	H10N30/00
H02N2/00	H01L41/00	Definition statement	H10N30/00
H02N2/00	H01L41/00	Definition statement	H10N30/00
H02N2/00	H01L41/00	Definition statement	H10N30/00
H02N2/00	H01L41/00	Informative references	H10N30/00
H02N10/00	H01L37/00	Limiting references	H10N15/00
H02N10/00	H01L37/04	Limiting references	H10N15/20
H02N11/002	H01L35/00	Limiting references	H10N10/00
H02N11/002	H01L37/00	Limiting references	H10N15/00
H02N11/002	H01L37/04	Limiting references	H10N15/20
H02N15/04	H01L39/00	Informative references	H10N60/00
H02S	H01L35/00	Limiting references	H10N10/00
H02S	H01L37/00	Limiting references	H10N15/00
H02S10/30	H01L35/00	Limiting references	H10N10/00
H03B5/32	H01L41/00	Informative references	H10N30/00
H03B5/40	H01L41/00	Informative references	H10N30/00
H03B15/00	H01L43/00	Informative references	H10N50/00
H03F3/54	H01L45/02	Application-oriented references	H10N70/10

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H03H3/00	H01L41/00	Limiting references	H10N30/00
H03H9/00	H01L41/00	Limiting references	H10N30/00
H04N5/40	H01L27/20	Informative references	H10N39/00
H04R15/00	H01L41/00	Informative references	H10N30/00
H04R15/00	H01L41/06	Informative references	H10N35/80
H04R15/00	H01L41/12	Informative references	H10N35/00
H04R15/00	H01L41/20	Informative references	H10N35/85
H04R17/00	Piezo-electric or electrostrictive elements in general H01L41/00	Informative references	H10N30/00
H04R17/00	Details of piezo-electric or electrostrictive motors, generators or positioners H01L41/00	Informative references	Delete the entire reference.
H04R17/00	H01L41/04	Informative references	H10N30/80
H04R17/00	H01L41/08	Informative references	H10N30/00
H04R17/00	H01L41/16	Informative references	H10N30/85
H04R17/00	H01L41/22	Informative references	H10N30/01
H04R17/005	H01L41/193	Informative references	H10N30/857
H04R17/02	H01L41/113	Informative references	H10N30/30
H04R17/025	H01L41/193	Informative references	H10N30/857
H05K1/00	H01L35/00	Informative references	H10N10/00
H05K1/00	H01L41/00	Informative references	H10N30/00
H05K9/0077	H01L39/00	Informative references	H10N60/00

NOTES:
- The CRL tables above are used for changes to locations **outside** of the project scope. Changes to references in scheme titles or definitions <u>inside</u> the project scope will be reflected in the "scheme change" template or one of the "definition" templates.

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- In addition to other changes proposed in the tables above, in the column titled "Referenced subclass or group to be changed," **referenced** D symbols should indicate an action of "delete" or should indicate a replacement symbol and **referenced** F symbols should indicate a replacement symbol.
- When a reference is deleted, text related to that reference will also be deleted unless other references or a range of references associated with the same text remain.