EUROPEAN PATENT OFFICE
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CPC NOTICE OF CHANGES 1411

DATE: FEBRUARY 1, 2023

PROJECT RP11766

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

Action	**Subclass**	**Group(s)**
SCHEME:		
Symbols Deleted:	H01L	21/8229, 21/8239
	H01L	27/1023, 27/1024, 27/1025, 27/1026, 27/1052, 27/108, 27/10802, 27/10805, 27/10808, 27/10811, 27/10814, 27/10817, 27/1082, 27/10823, 27/10826, 27/10829, 27/10832, 27/10835, 27/10838, 27/10841, 27/10844, 27/10847, 27/1085, 27/10852, 27/10855, 27/10858, 27/10861, 27/10864, 27/10867, 27/1087, 27/10873, 27/10876, 27/10879, 27/10882, 27/10885, 27/10888, 27/10891, 27/10894, 27/10897, 27/11, 27/1104, 27/1108, 27/1112, 27/1116, 27/112, 27/11206, 27/11213, 27/1122, 27/11226, 27/11233, 27/1124, 27/11246, 27/11253, 27/1126, 27/11266, 27/11273, 27/1128, 27/11286, 27/11293, 27/115, 27/11502, 27/11504, 27/11507, 27/11509, 27/11512, 27/11514, 27/11517, 27/11519, 27/11521, 27/11524, 27/11526, 27/11529, 27/11531, 27/11534, 27/11536, 27/11539, 27/11541, 27/11543, 27/11546, 27/11548, 27/11551, 27/11553, 27/11556, 27/11558, 27/1156, 27/11563, 27/11565, 27/11568, 27/1157, 27/11573, 27/11575, 27/11578, 27/1158, 27/11582, 27/11585, 27/11587, 27/1159, 27/11592, 27/11595, 27/11597
Symbols New:	H10B	Subclass
	H10B	10/00, 10/10, 10/12, 10/125, 10/15, 10/18
	H10B	12/00, 12/01, 12/02, 12/03, 12/033, 12/0335, 12/036, 12/038, 12/0383, 12/0385, 12/0387, 12/05, 12/053, 12/056, 12/09, 12/10, 12/20, 12/30, 12/31, 12/312, 12/315, 12/318, 12/33, 12/34, 12/36, 12/37, 12/373, 12/377, 12/39, 12/395, 12/48, 12/482, 12/485, 12/488, 12/50
	H10B	20/00, 20/10, 20/20, 20/25, 20/27, 20/30, 20/34, 20/36, 20/363, 20/367, 20/38, 20/383, 20/387, 20/40, 20/50, 20/60, 20/65

Action	**Subclass**	**Group(s)**
	H10B	41/00, 41/10, 41/20, 41/23, 41/27, 41/30, 41/35, 41/40, 41/41, 41/42, 41/43, 41/44, 41/46, 41/47, 41/48, 41/49, 41/50, 41/60, 41/70
	H10B	43/00, 43/10, 43/20, 43/23, 43/27, 43/30, 43/35, 43/40, 43/50
	H10B	51/00, 51/10, 51/20, 51/30, 51/40, 51/50
	H10B	53/00, 53/10, 53/20, 53/30, 53/40, 53/50
	H10B	61/00, 61/10, 61/20, 61/22
	H10B	63/00, 63/10, 63/20, 63/22, 63/24, 63/30, 63/32, 63/34, 63/80, 63/82, 63/84, 63/845
	H10B	69/00
	H10B	80/00
	H10B	99/00, 99/10, 99/14, 99/16, 99/20, 99/22
Warnings New:	H01L	27/10, 27/101, 27/102, 27/1021, 27/1022, 27/1027, 27/1028, 27/105
	H10B	10/10
	H10B	12/10
	H10B	20/10, 20/20, 20/25
	H10B	61/00
	H10B	63/00, 63/10
	H10B	69/00
	H10B	80/00
	H10B	99/00, 99/10, 99/14, 99/16, 99/20, 99/22
Guidance Headings New:	H10B	10/00
	H10B	20/00
DEFINITIONS:		
Definitions Deleted: (no frozen (F) symbol definitions should be deleted)	H01L	21/8239
	H01L	27/1023, 27/1025, 27/1026, 27/108, 27/10802, 27/10805, 27/10823, 27/10826, 27/10829, 27/10844, 27/1085, 27/1087, 27/10873, 27/10876, 27/10879, 27/10888, 27/11, 27/112, 27/115, 27/11502, 27/11517, 27/11563, 27/11585
Definitions Modified:	H01L	27/105

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): H01L21/77, B81B, B81C, G11B25/00, G11C11/22, G11C11/401, G11C11/41, G11C16/00, G11C17/00, H01L23/3178, H01L27/13

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. New, Modified or Deleted Group(s)

SUBCLASS H10B - ELECTRONIC MEMORY DEVICES

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#**
D	H01L 21/8229	7	Memory structures	<administrative transfer to H10B 99/00>
D	H01L 21/8239	8	Memory structures	<administrative transfer to H10B 99/00>
C	H01L 27/10	3	including a plurality of individual components in a repetitive configuration	H01L 27/10, H10B 99/10
C	H01L 27/101	4	{including resistors or capacitors only}	H01L 27/101, H10B 99/14
C	H01L 27/102	4	including bipolar components	H01L 27/102, H10B 99/00
C	H01L 27/1021	5	{including diodes only}	H01L 27/1021, H10B 99/16
C	H01L 27/1022	5	{including bipolar transistors}	H01L 27/1022, H10B 99/00
D	H01L 27/1023	6	{Bipolar dynamic random access memory structures}	<administrative transfer to H10B 12/10>
D	H01L 27/1024	6	{Arrays of single bipolar transistors only, e.g. read only memory structures}	<administrative transfer to H10B 20/10>
D	H01L 27/1025	6	{Static bipolar memory cell structures}	<administrative transfer to H10B 10/10>
D	H01L 27/1026	6	{Bipolar electrically programmable memory structures (using fuses H01L 23/525)}	<administrative transfer to H10B 69/00>
C	H01L 27/1027	5	{Thyristors}	H01L 27/1027, H10B 10/10, H10B 12/10, H10B 20/10, H10B 69/00, H10B 99/20
C	H01L 27/1028	5	{Double base diodes}	H01L 27/1028, H10B 10/10, H10B 12/10, H10B 20/10, H10B 69/00, H10B 99/00
C	H01L 27/105	4	including field-effect components	H01L 27/105, H10B 99/22
D	H01L 27/1052	5	{Memory structures and multistep manufacturing processes therefor not provided for in groups H01L 27/1055 - H01L 27/112}	<administrative transfer to H10B 99/00>

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#
D	H01L 27/108	5	Dynamic random access memory structures	<administrative transfer to H10B 12/00>
D	H01L 27/10802	6	{comprising floating-body transistors, e.g. floating-body cells}	<administrative transfer to H10B 12/20>
D	H01L 27/10805	6	{with one-transistor one-capacitor memory cells}	<administrative transfer to H10B 12/30>
D	H01L 27/10808	7	{the storage electrode stacked over transistor}	<administrative transfer to H10B 12/31>
D	H01L 27/10811	8	{with bit line higher than capacitor}	<administrative transfer to H10B 12/312>
D	H01L 27/10814	8	{with capacitor higher than bit line level}	<administrative transfer to H10B 12/315>
D	H01L 27/10817	8	{the storage electrode having multiple wings}	<administrative transfer to H10B 12/318>
D	H01L 27/1082	7	{the capacitor extending under transfer transistor area}	<administrative transfer to H10B 12/33>
D	H01L 27/10823	7	{the transistor having a trench structure in the substrate}	<administrative transfer to H10B 12/34>
D	H01L 27/10826	7	{the transistor being of the FinFET type}	<administrative transfer to H10B 12/36>
D	H01L 27/10829	7	{the capacitor being in a substrate trench}	<administrative transfer to H10B 12/37>
D	H01L 27/10832	8	{the capacitor extending under or around transfer transistor area}	<administrative transfer to H10B 12/373>
D	H01L 27/10835	8	{having storage electrode extension stacked over transistor}	<administrative transfer to H10B 12/377>
D	H01L 27/10838	7	{the capacitor and the transistor being in one trench}	<administrative transfer to H10B 12/39>
D	H01L 27/10841	8	{the transistor being vertical}	<administrative transfer to H10B 12/395>
D	H01L 27/10844	6	{Multistep manufacturing methods}	<administrative transfer to H10B 12/01>
D	H01L 27/10847	7	{for structures comprising one transistor one-capacitor memory cells}	<administrative transfer to H10B 12/02>
D	H01L 27/1085	8	{with at least one step of making the capacitor or connections thereto}	<administrative transfer to H10B 12/03>
D	H01L 27/10852	9	{the capacitor extending over the access transistor}	<administrative transfer to H10B 12/033>
D	H01L 27/10855	10	{with at least one step of making a connection between transistor and capacitor, e.g. plug}	<administrative transfer to H10B 12/0335>
D	H01L 27/10858	9	{the capacitor extending under the access transistor area}	<administrative transfer to H10B 12/036>

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#
D	H01L 27/10861	9	{the capacitor being in a substrate trench}	<administrative transfer to H10B 12/038>
D	H01L 27/10864	10	{in combination with a vertical transistor}	<administrative transfer to H10B 12/0383>
D	H01L 27/10867	10	{with at least one step of making a connection between transistor and capacitor, e.g. buried strap}	<administrative transfer to H10B 12/0385>
D	H01L 27/1087	10	{with at least one step of making the trench}	<administrative transfer to H10B 12/0387>
D	H01L 27/10873	8	{with at least one step of making the transistor}	<administrative transfer to H10B 12/05>
D	H01L 27/10876	9	{the transistor having a trench structure in the substrate (vertical transistor in combination with a capacitor formed in a substrate trench H01L 27/10864)}	<administrative transfer to H10B 12/053>
D	H01L 27/10879	9	{the transistor being of the FinFET type}	<administrative transfer to H10B 12/056>
D	H01L 27/10882	8	{with at least one step of making a data line}	<administrative transfer to H10B 12/48>
D	H01L 27/10885	9	{with at least one step of making a bit line}	<administrative transfer to H10B 12/482>
D	H01L 27/10888	9	{with at least one step of making a bit line contact}	<administrative transfer to H10B 12/485>
D	H01L 27/10891	9	{with at least one step of making a word line}	<administrative transfer to H10B 12/488>
D	H01L 27/10894	7	{with simultaneous manufacture of periphery and memory cells}	<administrative transfer to H10B 12/09>
D	H01L 27/10897	6	{Peripheral structures}	<administrative transfer to H10B 12/50>
D	H01L 27/11	5	Static random access memory structures	<administrative transfer to H10B 10/00>
D	H01L 27/1104	6	{the load element being a MOSFET transistor}	<administrative transfer to H10B 10/12>
D	H01L 27/1108	7	{the load element being a thin film transistor}	<administrative transfer to H10B 10/125>
D	H01L 27/1112	6	{the load element being a resistor (resistors for integrated circuits H01L 28/20, H01L 29/8605)}	<administrative transfer to H10B 10/15>
D	H01L 27/1116	6	{Peripheral circuit region}	<administrative transfer to H10B 10/18>
D	H01L 27/112	5	Read-only memory structures {[ROM] and multistep manufacturing processes therefor}	<administrative transfer to H10B 20/00>

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#
D	H01L 27/11206	6	{Programmable ROM [PROM], e.g. memory cells comprising a transistor and a fuse or an antifuse}	<administrative transfer to H10B 20/20>
D	H01L 27/11213	6	{ROM only}	<administrative transfer to H10B 20/27>
D	H01L 27/1122	7	{with source and drain on the same level, e.g. lateral transistors}	<administrative transfer to H10B 20/30>
D	H01L 27/11226	8	{Source or drain contact programmed}	<administrative transfer to H10B 20/34>
D	H01L 27/11233	8	{Gate programmed, e.g. different gate material or no gate}	<administrative transfer to H10B 20/36>
D	H01L 27/1124	9	{Gate contact programmed}	<administrative transfer to H10B 20/363>
D	H01L 27/11246	9	{Gate dielectric programmed, e.g. different thickness}	<administrative transfer to H10B 20/367>
D	H01L 27/11253	8	{Doping programmed, e.g. mask ROM}	<administrative transfer to H10B 20/38>
D	H01L 27/1126	9	{Entire channel doping programmed}	<administrative transfer to H10B 20/383>
D	H01L 27/11266	9	{Source or drain doping programmed}	<administrative transfer to H10B 20/387>
D	H01L 27/11273	7	{with source and drain on different levels, e.g. vertical channel}	<administrative transfer to H10B 20/40>
D	H01L 27/1128	7	{with transistors on different levels, e.g. 3D ROM}	<administrative transfer to H10B 20/50>
D	H01L 27/11286	6	{Peripheral circuit regions}	<administrative transfer to H10B 20/60>
D	H01L 27/11293	7	{of memory structures of the ROM-only type}	<administrative transfer to H10B 20/65>
D	H01L 27/115	6	Electrically programmable read-only memories; Multistep manufacturing processes therefor	<administrative transfer to H10B 69/00>
D	H01L 27/11502	7	with ferroelectric memory capacitors	<administrative transfer to H10B 53/00>
D	H01L 27/11504	8	characterised by the top-view layout	<administrative transfer to H10B 53/10>
D	H01L 27/11507	8	characterised by the memory core region	<administrative transfer to H10B 53/30>
D	H01L 27/11509	8	characterised by the peripheral circuit region	<administrative transfer to H10B 53/40>
D	H01L 27/11512	8	characterised by the boundary region between the core and peripheral circuit regions	<administrative transfer to H10B 53/50>

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#
D	H01L 27/11514	8	characterised by the three-dimensional arrangements, e.g. with cells on different height levels	<administrative transfer to H10B 53/20>
D	H01L 27/11517	7	with floating gate	<administrative transfer to H10B 41/00>
D	H01L 27/11519	8	characterised by the top-view layout	<administrative transfer to H10B 41/10>
D	H01L 27/11521	8	characterised by the memory core region (three-dimensional arrangements H01L 27/11551)	<administrative transfer to H10B 41/30>
D	H01L 27/11524	9	with cell select transistors, e.g. NAND	<administrative transfer to H10B 41/35>
D	H01L 27/11526	8	characterised by the peripheral circuit region	<administrative transfer to H10B 41/40>
D	H01L 27/11529	9	of memory regions comprising cell select transistors, e.g. NAND	<administrative transfer to H10B 41/41>
D	H01L 27/11531	9	Simultaneous manufacturing of periphery and memory cells	<administrative transfer to H10B 41/42>
D	H01L 27/11534	10	including only one type of peripheral transistor	<administrative transfer to H10B 41/43>
D	H01L 27/11536	11	with a control gate layer also being used as part of the peripheral transistor	<administrative transfer to H10B 41/44>
D	H01L 27/11539	11	with an inter-gate dielectric layer also being used as part of the peripheral transistor	<administrative transfer to H10B 41/46>
D	H01L 27/11541	11	with a floating-gate layer also being used as part of the peripheral transistor	<administrative transfer to H10B 41/47>
D	H01L 27/11543	11	with a tunnel dielectric layer also being used as part of the peripheral transistor	<administrative transfer to H10B 41/48>
D	H01L 27/11546	10	including different types of peripheral transistor	<administrative transfer to H10B 41/49>
D	H01L 27/11548	8	characterised by the boundary region between the core and peripheral circuit regions	<administrative transfer to H10B 41/50>
D	H01L 27/11551	8	characterised by three-dimensional arrangements, e.g. with cells on different height levels	<administrative transfer to H10B 41/20>
D	H01L 27/11553	9	with source and drain on different levels, e.g. with sloping channels	<administrative transfer to H10B 41/23>
D	H01L 27/11556	10	the channels comprising vertical portions, e.g. U-shaped channels	<administrative transfer to H10B 41/27>

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#
D	H01L 27/11558	8	the control gate being a doped region, e.g. single-poly memory cells	<administrative transfer to H10B 41/60>
D	H01L 27/1156	8	the floating gate being an electrode shared by two or more components	<administrative transfer to H10B 41/70>
D	H01L 27/11563	7	with charge-trapping gate insulators, e.g. MNOS or NROM	<administrative transfer to H10B 43/00>
D	H01L 27/11565	8	characterised by the top-view layout	<administrative transfer to H10B 43/10>
D	H01L 27/11568	8	characterised by the memory core region (three-dimensional arrangements H01L 27/11578)	<administrative transfer to H10B 43/30>
D	H01L 27/1157	9	with cell select transistors, e.g. NAND	<administrative transfer to H10B 43/35>
D	H01L 27/11573	8	characterised by the peripheral circuit region	<administrative transfer to H10B 43/40>
D	H01L 27/11575	8	characterised by the boundary region between the core and peripheral circuit regions	<administrative transfer to H10B 43/50>
D	H01L 27/11578	8	characterised by three-dimensional arrangements, e.g. with cells on different height levels	<administrative transfer to H10B 43/20>
D	H01L 27/1158	9	with source and drain on different levels, e.g. with sloping channels	<administrative transfer to H10B 43/23>
D	H01L 27/11582	10	the channels comprising vertical portions, e.g. U-shaped channels	<administrative transfer to H10B 43/27>
D	H01L 27/11585	7	with the gate electrodes comprising a layer used for its ferroelectric memory properties, e.g. metal-ferroelectric-semiconductor [MFS] or metal-ferroelectric-metal-insulator-semiconductor [MFMIS]	<administrative transfer to H10B 51/00>
D	H01L 27/11587	8	characterised by the top-view layout	<administrative transfer to H10B 51/10>
D	H01L 27/1159	8	characterised by the memory core region	<administrative transfer to H10B 51/30>
D	H01L 27/11592	8	characterised by the peripheral circuit region	<administrative transfer to H10B 51/40>
D	H01L 27/11595	8	characterised by the boundary region between core and peripheral circuit regions	<administrative transfer to H10B 51/50>

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#
D	H01L 27/11597	8	characterised by three-dimensional arrangements, e.g. cells on different height levels	<administrative transfer to H10B 51/20>
N	H10B	Subclass	ELECTRONIC MEMORY DEVICES	
N	H10B 10/00	0	Static random access memory [SRAM] devices	
N	H10B 10/10	1	SRAM devices comprising bipolar components	
N	H10B 10/12	1	{comprising a MOSFET load element}	
N	H10B 10/125	2	{the MOSFET being a thin film transistor [TFT]}	
N	H10B 10/15	1	{comprising a resistor load element}	
N	H10B 10/18	1	{Peripheral circuit regions}	
N	H10B 12/00	0	Dynamic random access memory [DRAM] devices	
N	H10B 12/01	1	{Manufacture or treatment}	
N	H10B 12/02	2	{for one transistor one-capacitor [1T-1C] memory cells}	
N	H10B 12/03	3	{Making the capacitor or connections thereto}	
N	H10B 12/033	4	{the capacitor extending over the transistor}	
N	H10B 12/0335	5	{Making a connection between the transistor and the capacitor, e.g. plug}	
N	H10B 12/036	4	{the capacitor extending under the transistor}	
N	H10B 12/038	4	{the capacitor being in a trench in the substrate}	
N	H10B 12/0383	5	{wherein the transistor is vertical}	
N	H10B 12/0385	5	{Making a connection between the transistor and the capacitor, e.g. buried strap}	
N	H10B 12/0387	5	{Making the trench}	
N	H10B 12/05	3	{Making the transistor}	
N	H10B 12/053	4	{the transistor being at least partially in a trench in the substrate (vertical transistor in combination with a capacitor formed in a substrate trench H10B 12/0383)}	
N	H10B 12/056	4	{the transistor being a FinFET}	

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	H10B 12/09	2	{with simultaneous manufacture of the peripheral circuit region and memory cells}	
N	H10B 12/10	1	DRAM devices comprising bipolar components	
N	H10B 12/20	1	{DRAM devices comprising floating-body transistors, e.g. floating-body cells}	
N	H10B 12/30	1	{DRAM devices comprising one-transistor - one-capacitor [1T-1C] memory cells}	
N	H10B 12/31	2	{having a storage electrode stacked over the transistor}	
N	H10B 12/312	3	{with a bit line higher than the capacitor}	
N	H10B 12/315	3	{with the capacitor higher than a bit line}	
N	H10B 12/318	3	{the storage electrode having multiple segments}	
N	H10B 12/33	2	{the capacitor extending under the transistor}	
N	H10B 12/34	2	{the transistor being at least partially in a trench in the substrate}	
N	H10B 12/36	2	{the transistor being a FinFET}	
N	H10B 12/37	2	{the capacitor being at least partially in a trench in the substrate}	
N	H10B 12/373	3	{the capacitor extending under or around the transistor}	
N	H10B 12/377	3	{having a storage electrode extension located over the transistor}	
N	H10B 12/39	2	{the capacitor and the transistor being in a same trench}	
N	H10B 12/395	3	{the transistor being vertical}	
N	H10B 12/48	2	{Data lines or contacts therefor}	
N	H10B 12/482	3	{Bit lines}	
N	H10B 12/485	3	{Bit line contacts}	
N	H10B 12/488	3	{Word lines}	
N	H10B 12/50	1	{Peripheral circuit region structures}	
N	H10B 20/00	0	Read-only memory [ROM] devices	
N	H10B 20/10	1	ROM devices comprising bipolar components	

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#
Q	H10B 20/20	1	Programmable ROM [PROM] devices comprising field-effect components (H10B 20/10 takes precedence)	H10B 20/20, H10B 20/25
N	H10B 20/25	2	One-time programmable ROM [OTPROM] devices, e.g. using electrically-fusible links	
N	H10B 20/27	1	{ROM only}	
N	H10B 20/30	2	{having the source region and the drain region on the same level, e.g. lateral transistors}	
N	H10B 20/34	3	{Source electrode or drain electrode programmed}	
N	H10B 20/36	3	{Gate programmed, e.g. different gate material or no gate}	
N	H10B 20/363	4	{Gate conductor programmed}	
N	H10B 20/367	4	{Gate dielectric programmed, e.g. different thickness}	
N	H10B 20/38	3	{Doping programmed, e.g. mask ROM}	
N	H10B 20/383	4	{Channel doping programmed}	
N	H10B 20/387	4	{Source region or drain region doping programmed}	
N	H10B 20/40	2	{having the source region and drain region on different levels, e.g. vertical channel}	
N	H10B 20/50	2	{having transistors on different levels, e.g. 3D ROM}	
N	H10B 20/60	1	{Peripheral circuit regions}	
N	H10B 20/65	2	{of memory structures of the ROM only type}	
N	H10B 41/00	0	Electrically erasable-and-programmable ROM [EEPROM] devices comprising floating gates	
N	H10B 41/10	1	characterised by the top-view layout	
N	H10B 41/20	1	characterised by three-dimensional arrangements, e.g. with cells on different height levels	
N	H10B 41/23	2	with source and drain on different levels, e.g. with sloping channels	
N	H10B 41/27	3	the channels comprising vertical portions, e.g. U-shaped channels	
N	H10B 41/30	1	characterised by the memory core region	

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	H10B 41/35	2	with a cell select transistor, e.g. NAND	
N	H10B 41/40	1	characterised by the peripheral circuit region	
N	H10B 41/41	2	of a memory region comprising a cell select transistor, e.g. NAND	
N	H10B 41/42	2	Simultaneous manufacture of periphery and memory cells	
N	H10B 41/43	3	comprising only one type of peripheral transistor	
N	H10B 41/44	4	with a control gate layer also being used as part of the peripheral transistor	
N	H10B 41/46	4	with an inter-gate dielectric layer also being used as part of the peripheral transistor	
N	H10B 41/47	4	with a floating-gate layer also being used as part of the peripheral transistor	
N	H10B 41/48	4	with a tunnel dielectric layer also being used as part of the peripheral transistor	
N	H10B 41/49	3	comprising different types of peripheral transistor	
N	H10B 41/50	1	characterised by the boundary region between the core region and the peripheral circuit region	
N	H10B 41/60	1	the control gate being a doped region, e.g. single-poly memory cell	
N	H10B 41/70	1	the floating gate being an electrode shared by two or more components	
N	H10B 43/00	0	EEPROM devices comprising charge-trapping gate insulators	
N	H10B 43/10	1	characterised by the top-view layout	
N	H10B 43/20	1	characterised by three-dimensional arrangements, e.g. with cells on different height levels	
N	H10B 43/23	2	with source and drain on different levels, e.g. with sloping channels	
N	H10B 43/27	3	the channels comprising vertical portions, e.g. U-shaped channels	

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	H10B 43/30	1	characterised by the memory core region	
N	H10B 43/35	2	with cell select transistors, e.g. NAND	
N	H10B 43/40	1	characterised by the peripheral circuit region	
N	H10B 43/50	1	characterised by the boundary region between the core and peripheral circuit regions	
N	H10B 51/00	0	Ferroelectric RAM [FeRAM] devices comprising ferroelectric memory transistors	
N	H10B 51/10	1	characterised by the top-view layout	
N	H10B 51/20	1	characterised by the three-dimensional arrangements, e.g. with cells on different height levels	
N	H10B 51/30	1	characterised by the memory core region	
N	H10B 51/40	1	characterised by the peripheral circuit region	
N	H10B 51/50	1	characterised by the boundary region between the core and peripheral circuit regions	
N	H10B 53/00	0	Ferroelectric RAM [FeRAM] devices comprising ferroelectric memory capacitors	
N	H10B 53/10	1	characterised by the top-view layout	
N	H10B 53/20	1	characterised by the three-dimensional arrangements, e.g. with cells on different height levels	
N	H10B 53/30	1	characterised by the memory core region	
N	H10B 53/40	1	characterised by the peripheral circuit region	
N	H10B 53/50	1	characterised by the boundary region between the core and peripheral circuit regions	
N	H10B 61/00	0	Magnetic memory devices, e.g. magnetoresistive RAM [MRAM] devices	

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	H10B 61/10	1	{comprising components having two electrodes, e.g. diodes or MIM elements}	
N	H10B 61/20	1	{comprising components having three or more electrodes, e.g. transistors}	
N	H10B 61/22	2	{of the field-effect transistor [FET] type}	
Q	H10B 63/00	0	Resistance change memory devices, e.g. resistive RAM [ReRAM] devices	H10B 63/00, H10B 63/10, H10N 79/00
N	H10B 63/10	1	Phase change RAM [PCRAM, PRAM] devices	
N	H10B 63/20	1	{comprising selection components having two electrodes, e.g. diodes}	
N	H10B 63/22	2	{of the metal-insulator-metal type}	
N	H10B 63/24	2	{of the Ovonic threshold switching type}	
N	H10B 63/30	1	{comprising selection components having three or more electrodes, e.g. transistors}	
N	H10B 63/32	2	{of the bipolar type}	
N	H10B 63/34	2	{of the vertical channel field-effect transistor type}	
N	H10B 63/80	1	{Arrangements comprising multiple bistable or multi-stable switching components of the same type on a plane parallel to the substrate, e.g. cross-point arrays}	
N	H10B 63/82	2	{the switching components having a common active material layer}	
N	H10B 63/84	2	{arranged in a direction perpendicular to the substrate, e.g. 3D cell arrays}	
N	H10B 63/845	3	{the switching components being connected to a common vertical conductor}	
N	H10B 69/00	0	Erasable-and-programmable ROM [EPROM] devices not provided for in groups H10B 41/00 - H10B 63/00, e.g. ultraviolet erasable-and-	

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#
			programmable ROM [UVEPROM] devices	
N	H10B 80/00	0	Assemblies of multiple devices comprising at least one memory device covered by this subclass	
Q	H10B 99/00	0	Subject matter not provided for in other groups of this subclass	H10B 99/00, H10B 10/10, H10B 12/10, H10B 20/10
N	H10B 99/10	1	{Memory cells having a cross-point geometry}	
N	H10B 99/14	1	{comprising memory cells that only have passive resistors or passive capacitors}	
N	H10B 99/16	1	{comprising memory cells having diodes}	
N	H10B 99/20	1	{comprising memory cells having thyristors}	
N	H10B 99/22	1	{including field-effect components}	

*N = new entries where reclassification into entries is involved; C = entries with modified file scope where reclassification of documents from the entries is involved; Q = new entries which are firstly populated with documents via administrative transfers from deleted (D) entries. Afterwards, the transferred documents into the Q entry will either stay or be moved to more appropriate entries, as determined by intellectual reclassification; T = existing entries with enlarged file scope, which receive documents from C or D entries, e.g. when a limiting reference is removed from the entry title; M = entries with no change to the file scope (no reclassification); D = deleted entries; F = frozen entries will be deleted once reclassification of documents from the entries is completed; U = entries that are unchanged.

NOTES:

- **No {curly brackets} are used for titles in CPC only subclasses, e.g. C12Y, A23Y; 2000 series symbol titles of groups found at the end of schemes (orthogonal codes); or the Y section titles. The {curly brackets} are used for 2000 series symbol titles found interspersed throughout the main trunk schemes (breakdown codes).
- U groups: it is obligatory to display the required "anchor" symbol (U group), i.e. the entry immediately preceding a new group or an array of new groups to be created (in case new groups are not clearly subgroups of C-type groups). Always include the symbol, indent level and title of the U group in the table above.
- All entry types should be included in the scheme changes table above for better understanding of the overall scheme change picture. Symbol, indent level, and title are required for all types.
- "Transferred to" column must be completed for all C, D, F, and Q type entries. F groups will be deleted once reclassification is completed.
- When multiple symbols are included in the "Transferred to" column, avoid using ranges of symbols in order to be as precise as possible.
- For administrative transfer of documents, the following text should be used: "<administrative transfer to XX>", "<administrative transfer to XX and YY simultaneously>", or "<administrative transfer to XX, YY, ...and ZZ simultaneously>" when administrative transfer of the same documents is to more than one place.
- Administrative transfer to main trunk groups is assumed to be the source allocation type, unless otherwise indicated.
- Administrative transfer to 2000/Y series groups is assumed to be "additional information".
- If needed, instructions for allocation type should be indicated within the angle brackets using the abbreviations "ADD" or "INV": <administrative transfer to XX ADD>, <administrative transfer to XX INV>, or < administrative transfer to XX ADD, YY INV, ... and ZZ ADD simultaneously>.

- In certain situations, the "D" entries of 2000-series or Y-series groups may not require a destination ("Transferred to") symbol, however it is required to specify "<no transfer>" in the "Transferred to" column for such cases.
- For finalisation projects, the deleted "F" symbols should have <no transfer> in the "Transferred to" column.
- For more details about the types of scheme change, see CPC Guide.

B. New, Modified or Deleted Warning(s)

SUBCLASS H10B - ELECTRONIC MEMORY DEVICES

Type	Location	Old warning	New warning
N	H01L 27/10		Group H01L 27/10 is impacted by reclassification into group H10B 99/10. Groups H01L 27/10 and H10B 99/10 should be considered in order to perform a complete search.
N	H01L 27/101		Group H01L 27/101 is impacted by reclassification into group H10B 99/14. Groups H01L 27/101 and H10B 99/14 should be considered in order to perform a complete search.
N	H01L 27/102		Group H01L 27/102 is impacted by reclassification into group H10B 99/00. Groups H01L 27/102 and H10B 99/00 should be considered in order to perform a complete search.
N	H01L 27/1021		Group H01L 27/1021 is impacted by reclassification into group H10B 99/16. Groups H01L 27/1021 and H10B 99/16 should be considered in order to perform a complete search.
N	H01L 27/1022		Group H01L 27/1022 is impacted by reclassification into group H10B 99/00. Groups H01L 27/1022 and H10B 99/00 should be considered in order to perform a complete search.
N	H01L 27/1027		Group H01L 27/1027 is impacted by reclassification into groups H10B 10/10, H10B 12/10, H10B 20/10, H10B 69/00 and H10B 99/20. All groups listed in this Warning should be considered in order to perform a complete search.
N	H01L 27/1028		Group H01L 27/1028 is impacted by reclassification into groups H10B 10/10, H10B 12/10, H10B 20/10, H10B 69/00 and H10B 99/20. All groups listed in this Warning should be considered in order to perform a complete search.
N	H01L 27/105		Group H01L 27/105 is impacted by reclassification into group H10B 99/22. Groups H01L 27/105 and H10B 99/22 should be considered in order to perform a complete search.
N	H10B 10/10		Group H10B 10/10 is incomplete pending reclassification of documents from groups H01L 27/1027, H01L 27/1028 and H10B 99/00. All groups listed in this Warning should be

Type	Location	Old warning	New warning
			considered in order to perform a complete search.
N	H10B 12/10		Group H10B 12/10 is incomplete pending reclassification of documents from groups H01L 27/1027, H01L 27/1028 and H10B 99/00. All groups listed in this Warning should be considered in order to perform a complete search.
N	H10B 20/10		Group H10B 20/10 is incomplete pending reclassification of documents from groups H01L 27/1027, H01L 27/1028 and H10B 99/00. All groups listed in this Warning should be considered in order to perform a complete search.
N	H10B 20/20		Group H10B 20/20 is impacted by reclassification into group H10B 20/25. Groups H10B 20/20 and H10B 20/25 should be considered in order to perform a complete search.
N	H10B 20/25		Group H10B 20/25 is incomplete pending reclassification of documents from group H10B 20/20. Groups H10B 20/20 and H10B 20/25 should be considered in order to perform a complete search.
N	H10B 61/00		Group H10B 61/00 is incomplete pending reclassification of documents from group H10N 59/00. Groups H10N 59/00 and H10B 61/00 should be considered in order to perform a complete search.
N	H10B 63/00		Group H10B 63/00 is impacted by reclassification into groups H10B 63/10 and H10N 79/00. All groups listed in this Warning should be considered in order to perform a complete search.
N	H10B 63/10		Group H10B 63/10 is incomplete pending reclassification of documents from group H10B 63/00. Groups H10B 63/00 and H10B 63/10 should be considered in order to perform a complete search.
N	H10B 69/00		Group H10B 69/00 is incomplete pending reclassification of documents from groups H01L 27/1027 and H01L 27/1028. Groups H01L 27/1027, H01L 27/1028 and H10B 69/00 should be considered in order to perform a complete search.
N	H10B 80/00		Group H10B 80/00 is incomplete pending reclassification of documents

Type	Location	Old warning	New warning
			from groups H01L 25/065, H01L 25/0652, H01L 25/0655, H01L 25/0657 and H01L 25/18. All groups listed in this Warning should be considered in order to perform a complete search.
N	H10B 99/00		Group H10B 99/00 is incomplete pending reclassification of documents from groups H01L 27/102 and H01L 27/1022. Group H10B 99/00 is also impacted by reclassification into groups H10B 10/10, H10B 12/10 and H10B 20/10. All groups listed in this Warning should be considered in order to perform a complete search.
N	H10B 99/10		Group H10B 99/10 is incomplete pending reclassification of documents from group H01L 27/10. Groups H01L 27/10 and H10B 99/10 should be considered in order to perform a complete search.
N	H10B 99/14		Group H10B 99/14 is incomplete pending reclassification of documents from group H01L 27/101. Groups H01L 27/101 and H10B 99/14 should be considered in order to perform a complete search.
N	H10B 99/16		Group H10B 99/16 is incomplete pending reclassification of documents from group H01L 27/1021. Groups H01L 27/1021 and H10B 99/16 should be considered in order to perform a complete search.
N	H10B 99/20		Group H10B 99/20 is incomplete pending reclassification of documents from groups H01L 27/1027 and H01L 27/1028. Groups H01L 27/1027, H01L 27/1028 and H10B 99/20 should be considered in order to perform a complete search.
N	H10B 99/22		Group H10B 99/22 is incomplete pending reclassification of documents from group H01L 27/105. Groups H01L 27/105 and H10B 99/22 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 Guidance Heading(s)

SUBCLASS H10B - ELECTRONIC MEMORY DEVICES

Type*	Location	Old Guidance Heading	New Guidance Heading
N	H10B 10/00 - H10B 12/00		Volatile memory devices
N	H10B 20/00 - H10B 69/00		Non-volatile memory 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**
H01L21/8239			Delete: The entire Definition.
H01L27/1023			Delete: The entire Definition.
H01L27/1025			Delete: The entire Definition.
H01L27/1026			Delete: The entire Definition.
H01L27/105	Limiting references	H01L27/10894	Replace: The existing symbol with H10B 12/09.
H01L27/105	Limiting references	H01L27/10897	Replace: The existing symbol with H10B 12/50.
H01L27/105	Limiting references	H01L27/11509	Replace: The existing symbol with H10B 53/40.
H01L27/105	Limiting references	H01L27/11526	Replace: The existing symbol with H10B 41/40.
H01L27/105	Limiting references	H01L27/11573	Replace: The existing symbol with H10B 43/40.
H01L27/105	Limiting references	H01L27/11592	Replace: The existing symbol with H10B 51/40.
H01L27/108			Delete: The entire Definition.
H01L27/10802			Delete: The entire Definition.
H01L27/10805			Delete: The entire Definition.
H01L27/10823			Delete: The entire Definition.
H01L27/10826			Delete: The entire Definition.
H01L27/10829			Delete: The entire Definition.
H01L27/10844			Delete: The entire Definition.
H01L27/1085			Delete: The entire Definition.
H01L27/1087			Delete: The entire Definition.
H01L27/10873			Delete: The entire Definition.
H01L27/10876			Delete: The entire Definition.

H01L27/10879			Delete: The entire Definition.
H01L27/10888			Delete: The entire Definition.
H01L27/11			Delete: The entire Definition.
H01L27/112			Delete: The entire Definition.
H01L27/115			Delete: The entire Definition.
H01L27/11502			Delete: The entire Definition.
H01L27/11517			Delete: The entire Definition.
H01L27/11563			Delete: The entire Definition.
H01L27/11585			Delete: The entire Definition.

Notes:
Use this Definitions Quick Fix (DQF) table to:

- Delete an entire definition
- Delete an entire section
- Change a reference symbol
- Delete a reference symbol
- Delete text in a References section
- Correct one error in spelling, article use, or verb tense

Otherwise, use the standard template.

Reminder: Never delete F symbol definitions.

3. REVISION CONCORDANCE LIST (RCL)

Type*	**From CPC Symbol (existing)**	**To CPC Symbol(s)**
D	H01L 21/8229	<administrative transfer to H10B 99/00>
D	H01L 21/8239	<administrative transfer to H10B 99/00>
C	H01L 27/10	H01L 27/10, H10B 99/10
C	H01L 27/101	H01L 27/101, H10B 99/14
C	H01L 27/102	H01L 27/102, H10B 99/00
C	H01L 27/1021	H01L 27/1021, H10B 99/16
C	H01L 27/1022	H01L 27/1022, H10B 99/00
D	H01L 27/1023	<administrative transfer to H10B 12/10>
D	H01L 27/1024	<administrative transfer to H10B 20/10>
D	H01L 27/1025	<administrative transfer to H10B 10/10>
D	H01L 27/1026	<administrative transfer to H10B 69/00>
C	H01L 27/1027	H01L 27/1027, H10B 10/10, H10B 12/10, H10B 20/10, H10B 69/00, H10B 99/20
C	H01L 27/1028	H01L 27/1028, H10B 10/10, H10B 12/10, H10B 20/10, H10B 69/00, H10B 99/00
C	H01L 27/105	H01L 27/105, H10B 99/22
D	H01L 27/1052	<administrative transfer to H10B 99/00>
D	H01L 27/108	<administrative transfer to H10B 12/00>
D	H01L 27/10802	<administrative transfer to H10B 12/20>
D	H01L 27/10805	<administrative transfer to H10B 12/30>
D	H01L 27/10808	<administrative transfer to H10B 12/31>
D	H01L 27/10811	<administrative transfer to H10B 12/312>
D	H01L 27/10814	<administrative transfer to H10B 12/315>
D	H01L 27/10817	<administrative transfer to H10B 12/318>
D	H01L 27/1082	<administrative transfer to H10B 12/33>
D	H01L 27/10823	<administrative transfer to H10B 12/34>
D	H01L 27/10826	<administrative transfer to H10B 12/36>
D	H01L 27/10829	<administrative transfer to H10B 12/37>
D	H01L 27/10832	<administrative transfer to H10B 12/373>
D	H01L 27/10835	<administrative transfer to H10B 12/377>
D	H01L 27/10838	<administrative transfer to H10B 12/39>
D	H01L 27/10841	<administrative transfer to H10B 12/395>
D	H01L 27/10844	<administrative transfer to H10B 12/01>
D	H01L 27/10847	<administrative transfer to H10B 12/02>
D	H01L 27/1085	<administrative transfer to H10B 12/03>
D	H01L 27/10852	<administrative transfer to H10B 12/033>
D	H01L 27/10855	<administrative transfer to H10B 12/0335>
D	H01L 27/10858	<administrative transfer to H10B 12/036>
D	H01L 27/10861	<administrative transfer to H10B 12/038>
D	H01L 27/10864	<administrative transfer to H10B 12/0383>
D	H01L 27/10867	<administrative transfer to H10B 12/0385>
D	H01L 27/1087	<administrative transfer to H10B 12/0387>
D	H01L 27/10873	<administrative transfer to H10B 12/05>
D	H01L 27/10876	<administrative transfer to H10B 12/053>
D	H01L 27/10879	<administrative transfer to H10B 12/056>

Type*	**From CPC Symbol (existing)**	**To CPC Symbol(s)**
D	H01L 27/10882	<administrative transfer to H10B 12/48>
D	H01L 27/10885	<administrative transfer to H10B 12/482>
D	H01L 27/10888	<administrative transfer to H10B 12/485>
D	H01L 27/10891	<administrative transfer to H10B 12/488>
D	H01L 27/10894	<administrative transfer to H10B 12/09>
D	H01L 27/10897	<administrative transfer to H10B 12/50>
D	H01L 27/11	<administrative transfer to H10B 10/00>
D	H01L 27/1104	<administrative transfer to H10B 10/12>
D	H01L 27/1108	<administrative transfer to H10B 10/125>
D	H01L 27/1112	<administrative transfer to H10B 10/15>
D	H01L 27/1116	<administrative transfer to H10B 10/18>
D	H01L 27/112	<administrative transfer to H10B 20/00>
D	H01L 27/11206	<administrative transfer to H10B 20/20>
D	H01L 27/11213	<administrative transfer to H10B 20/27>
D	H01L 27/1122	<administrative transfer to H10B 20/30>
D	H01L 27/11226	<administrative transfer to H10B 20/34>
D	H01L 27/11233	<administrative transfer to H10B 20/36>
D	H01L 27/1124	<administrative transfer to H10B 20/363>
D	H01L 27/11246	<administrative transfer to H10B 20/367>
D	H01L 27/11253	<administrative transfer to H10B 20/38>
D	H01L 27/1126	<administrative transfer to H10B 20/383>
D	H01L 27/11266	<administrative transfer to H10B 20/387>
D	H01L 27/11273	<administrative transfer to H10B 20/40>
D	H01L 27/1128	<administrative transfer to H10B 20/50>
D	H01L 27/11286	<administrative transfer to H10B 20/60>
D	H01L 27/11293	<administrative transfer to H10B 20/65>
D	H01L 27/115	<administrative transfer to H10B 69/00>
D	H01L 27/11502	<administrative transfer to H10B 53/00>
D	H01L 27/11504	<administrative transfer to H10B 53/10>
D	H01L 27/11507	<administrative transfer to H10B 53/30>
D	H01L 27/11509	<administrative transfer to H10B 53/40>
D	H01L 27/11512	<administrative transfer to H10B 53/50>
D	H01L 27/11514	<administrative transfer to H10B 53/20>
D	H01L 27/11517	<administrative transfer to H10B 41/00>
D	H01L 27/11519	<administrative transfer to H10B 41/10>
D	H01L 27/11521	<administrative transfer to H10B 41/30>
D	H01L 27/11524	<administrative transfer to H10B 41/35>
D	H01L 27/11526	<administrative transfer to H10B 41/40>
D	H01L 27/11529	<administrative transfer to H10B 41/41>
D	H01L 27/11531	<administrative transfer to H10B 41/42>
D	H01L 27/11534	<administrative transfer to H10B 41/43>
D	H01L 27/11536	<administrative transfer to H10B 41/44>
D	H01L 27/11539	<administrative transfer to H10B 41/46>
D	H01L 27/11541	<administrative transfer to H10B 41/47>
D	H01L 27/11543	<administrative transfer to H10B 41/48>
D	H01L 27/11546	<administrative transfer to H10B 41/49>
D	H01L 27/11548	<administrative transfer to H10B 41/50>
D	H01L 27/11551	<administrative transfer to H10B 41/20>
D	H01L 27/11553	<administrative transfer to H10B 41/23>

Type*	**From CPC Symbol (existing)**	**To CPC Symbol(s)**
D	H01L 27/11556	<administrative transfer to H10B 41/27>
D	H01L 27/11558	<administrative transfer to H10B 41/60>
D	H01L 27/1156	<administrative transfer to H10B 41/70>
D	H01L 27/11563	<administrative transfer to H10B 43/00>
D	H01L 27/11565	<administrative transfer to H10B 43/10>
D	H01L 27/11568	<administrative transfer to H10B 43/30>
D	H01L 27/1157	<administrative transfer to H10B 43/35>
D	H01L 27/11573	<administrative transfer to H10B 43/40>
D	H01L 27/11575	<administrative transfer to H10B 43/50>
D	H01L 27/11578	<administrative transfer to H10B 43/20>
D	H01L 27/1158	<administrative transfer to H10B 43/23>
D	H01L 27/11582	<administrative transfer to H10B 43/27>
D	H01L 27/11585	<administrative transfer to H10B 51/00>
D	H01L 27/11587	<administrative transfer to H10B 51/10>
D	H01L 27/1159	<administrative transfer to H10B 51/30>
D	H01L 27/11592	<administrative transfer to H10B 51/40>
D	H01L 27/11595	<administrative transfer to H10B 51/50>
D	H01L 27/11597	<administrative transfer to H10B 51/20>
Q	H10B 20/20	H10B 20/20, H10B 20/25
Q	H10B 63/00	H10B 63/00, H10B 63/10, H10N 79/00
Q	H10B 99/00	H10B 99/00, H10B 10/10, H10B 12/10, H10B 20/10

* 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 21/8229		DELETE
H01L 21/8239		DELETE
H01L 27/1023		DELETE
H01L 27/1024		DELETE
H01L 27/1025		DELETE
H01L 27/1026		DELETE
H01L 27/1052		DELETE
H01L 27/108		DELETE
H01L 27/10802		DELETE
H01L 27/10805		DELETE
H01L 27/10808		DELETE
H01L 27/10811		DELETE
H01L 27/10814		DELETE
H01L 27/10817		DELETE
H01L 27/1082		DELETE
H01L 27/10823		DELETE
H01L 27/10826		DELETE
H01L 27/10829		DELETE
H01L 27/10832		DELETE
H01L 27/10835		DELETE
H01L 27/10838		DELETE
H01L 27/10841		DELETE
H01L 27/10844		DELETE
H01L 27/10847		DELETE
H01L 27/1085		DELETE
H01L 27/10852		DELETE
H01L 27/10855		DELETE
H01L 27/10858		DELETE
H01L 27/10861		DELETE
H01L 27/10864		DELETE
H01L 27/10867		DELETE
H01L 27/1087		DELETE
H01L 27/10873		DELETE
H01L 27/10876		DELETE
H01L 27/10879		DELETE
H01L 27/10882		DELETE
H01L 27/10885		DELETE
H01L 27/10888		DELETE
H01L 27/10891		DELETE
H01L 27/10894		DELETE
H01L 27/10897		DELETE

CPC	**IPC**	**Action***
H01L 27/11		DELETE
H01L 27/1104		DELETE
H01L 27/1108		DELETE
H01L 27/1112		DELETE
H01L 27/1116		DELETE
H01L 27/112		DELETE
H01L 27/11206		DELETE
H01L 27/11213		DELETE
H01L 27/1122		DELETE
H01L 27/11226		DELETE
H01L 27/11233		DELETE
H01L 27/1124		DELETE
H01L 27/11246		DELETE
H01L 27/11253		DELETE
H01L 27/1126		DELETE
H01L 27/11266		DELETE
H01L 27/11273		DELETE
H01L 27/1128		DELETE
H01L 27/11286		DELETE
H01L 27/11293		DELETE
H01L 27/115		DELETE
H01L 27/11502		DELETE
H01L 27/11504		DELETE
H01L 27/11507		DELETE
H01L 27/11509		DELETE
H01L 27/11512		DELETE
H01L 27/11514		DELETE
H01L 27/11517		DELETE
H01L 27/11519		DELETE
H01L 27/11521		DELETE
H01L 27/11524		DELETE
H01L 27/11526		DELETE
H01L 27/11529		DELETE
H01L 27/11531		DELETE
H01L 27/11534		DELETE
H01L 27/11536		DELETE
H01L 27/11539		DELETE
H01L 27/11541		DELETE
H01L 27/11543		DELETE
H01L 27/11546		DELETE
H01L 27/11548		DELETE
H01L 27/11551		DELETE
H01L 27/11553		DELETE
H01L 27/11556		DELETE
H01L 27/11558		DELETE

CPC	**IPC**	**Action***
H01L 27/1156		DELETE
H01L 27/11563		DELETE
H01L 27/11565		DELETE
H01L 27/11568		DELETE
H01L 27/1157		DELETE
H01L 27/11573		DELETE
H01L 27/11575		DELETE
H01L 27/11578		DELETE
H01L 27/1158		DELETE
H01L 27/11582		DELETE
H01L 27/11585		DELETE
H01L 27/11587		DELETE
H01L 27/1159		DELETE
H01L 27/11592		DELETE
H01L 27/11595		DELETE
H01L 27/11597		DELETE
H10B 10/00	H10B 10/00	NEW
H10B 10/10	H10B 10/10	NEW
H10B 10/12	H10B 10/00	NEW
H10B 10/125	H10B 10/00	NEW
H10B 10/15	H10B 10/00	NEW
H10B 10/18	H10B 10/00	NEW
H10B 12/00	H10B 12/00	NEW
H10B 12/01	H10B 12/00	NEW
H10B 12/02	H10B 12/00	NEW
H10B 12/03	H10B 12/00	NEW
H10B 12/033	H10B 12/00	NEW
H10B 12/0335	H10B 12/00	NEW
H10B 12/036	H10B 12/00	NEW
H10B 12/038	H10B 12/00	NEW
H10B 12/0383	H10B 12/00	NEW
H10B 12/0385	H10B 12/00	NEW
H10B 12/0387	H10B 12/00	NEW
H10B 12/05	H10B 12/00	NEW
H10B 12/053	H10B 12/00	NEW
H10B 12/056	H10B 12/00	NEW
H10B 12/09	H10B 12/00	NEW
H10B 12/10	H10B 12/10	NEW
H10B 12/20	H10B 12/00	NEW
H10B 12/30	H10B 12/00	NEW
H10B 12/31	H10B 12/00	NEW
H10B 12/312	H10B 12/00	NEW
H10B 12/315	H10B 12/00	NEW
H10B 12/318	H10B 12/00	NEW
H10B 12/33	H10B 12/00	NEW

CPC	**IPC**	**Action***
H10B 12/34	H10B 12/00	NEW
H10B 12/36	H10B 12/00	NEW
H10B 12/37	H10B 12/00	NEW
H10B 12/373	H10B 12/00	NEW
H10B 12/377	H10B 12/00	NEW
H10B 12/39	H10B 12/00	NEW
H10B 12/395	H10B 12/00	NEW
H10B 12/48	H10B 12/00	NEW
H10B 12/482	H10B 12/00	NEW
H10B 12/485	H10B 12/00	NEW
H10B 12/488	H10B 12/00	NEW
H10B 12/50	H10B 12/00	NEW
H10B 20/00	H10B 20/00	NEW
H10B 20/10	H10B 20/10	NEW
H10B 20/20	H10B 20/20	NEW
H10B 20/25	H10B 20/25	NEW
H10B 20/27	H10B 20/00	NEW
H10B 20/30	H10B 20/00	NEW
H10B 20/34	H10B 20/00	NEW
H10B 20/36	H10B 20/00	NEW
H10B 20/363	H10B 20/00	NEW
H10B 20/367	H10B 20/00	NEW
H10B 20/38	H10B 20/00	NEW
H10B 20/383	H10B 20/00	NEW
H10B 20/387	H10B 20/00	NEW
H10B 20/40	H10B 20/00	NEW
H10B 20/50	H10B 20/00	NEW
H10B 20/60	H10B 20/00	NEW
H10B 20/65	H10B 20/00	NEW
H10B 41/00	H10B 41/00	NEW
H10B 41/10	H10B 41/10	NEW
H10B 41/20	H10B 41/20	NEW
H10B 41/23	H10B 41/23	NEW
H10B 41/27	H10B 41/27	NEW
H10B 41/30	H10B 41/30	NEW
H10B 41/35	H10B 41/35	NEW
H10B 41/40	H10B 41/40	NEW
H10B 41/41	H10B 41/41	NEW
H10B 41/42	H10B 41/42	NEW
H10B 41/43	H10B 41/43	NEW
H10B 41/44	H10B 41/44	NEW
H10B 41/46	H10B 41/46	NEW
H10B 41/47	H10B 41/47	NEW
H10B 41/48	H10B 41/48	NEW
H10B 41/49	H10B 41/49	NEW

CPC	**IPC**	**Action***
H10B 41/50	H10B 41/50	NEW
H10B 41/60	H10B 41/60	NEW
H10B 41/70	H10B 41/70	NEW
H10B 43/00	H10B 43/00	NEW
H10B 43/10	H10B 43/10	NEW
H10B 43/20	H10B 43/20	NEW
H10B 43/23	H10B 43/23	NEW
H10B 43/27	H10B 43/27	NEW
H10B 43/30	H10B 43/30	NEW
H10B 43/35	H10B 43/35	NEW
H10B 43/40	H10B 43/40	NEW
H10B 43/50	H10B 43/50	NEW
H10B 51/00	H10B 51/00	NEW
H10B 51/10	H10B 51/10	NEW
H10B 51/20	H10B 51/20	NEW
H10B 51/30	H10B 51/30	NEW
H10B 51/40	H10B 51/40	NEW
H10B 51/50	H10B 51/50	NEW
H10B 53/00	H10B 53/00	NEW
H10B 53/10	H10B 53/10	NEW
H10B 53/20	H10B 53/20	NEW
H10B 53/30	H10B 53/30	NEW
H10B 53/40	H10B 53/40	NEW
H10B 53/50	H10B 53/50	NEW
H10B 61/00	H10B 61/00	NEW
H10B 61/10	H10B 61/00	NEW
H10B 61/20	H10B 61/00	NEW
H10B 61/22	H10B 61/00	NEW
H10B 63/00	H10B 63/00	NEW
H10B 63/10	H10B 63/10	NEW
H10B 63/20	H10B 63/00	NEW
H10B 63/22	H10B 63/00	NEW
H10B 63/24	H10B 63/00	NEW
H10B 63/30	H10B 63/00	NEW
H10B 63/32	H10B 63/00	NEW
H10B 63/34	H10B 63/00	NEW
H10B 63/80	H10B 63/00	NEW
H10B 63/82	H10B 63/00	NEW
H10B 63/84	H10B 63/00	NEW
H10B 63/845	H10B 63/00	NEW
H10B 69/00	H10B 69/00	NEW
H10B 80/00	H10B 80/00	NEW
H10B 99/00	H10B 99/00	NEW
H10B 99/10	H10B 99/00	NEW
H10B 99/14	H10B 99/00	NEW

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CPC	**IPC**	**Action***
H10B 99/16	H10B 99/00	NEW
H10B 99/20	H10B 99/00	NEW
H10B 99/22	H10B 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**
H01L21/77	H01L27/115	H10B 69/00
H01L21/77 NOTE	H01L 27/14 - H01L 27/32	H01L 27/14, H01L27 /15, H10N 19/00, H10N 39/00, H10N 59/00, H10N 79/00, H10N 89/00, H10K 19/00, H10K 39/00, H10K 59/00 and H10K 65/00
H01L21/77 NOTE	H01L 27/1052	H10B 99/00
H01L21/77 NOTE	H01L 27/10844	H10B 12/01
H01L21/77 NOTE	H01L 27/11	H10B 10/00
H01L21/77 NOTE	H01L 27/112	H10B 20/00
H01L21/77 NOTE	H01L27/115	H10B 69/00
H01L 27/00 NOTE	NOTE	Replace the Notes 1 and 2 with the following single Note: In this group the last place priority rule is applied, i.e. at each hierarchical level, in the absence of an indication to the contrary, classification is made in the last appropriate place.

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**
B81B	H01L27/112	Informative references	H10B 20/00
B81C	H01L27/112	Informative references	H10B 20/00
G11B25/00	H01L27/108	Informative references	H10B 12/00

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Location of reference to be changed	**Referenced subclass or group to be changed**	**Section of definition**	**Action; New reference symbol; New text**
G11B25/00	H01L27/115	Informative references	H10B 69/00
G11C11/22	H01L27/11502	Informative references	H10B 53/00
G11C11/22	H01L27/11585	Informative references	H10B 51/00
G11C11/401	H01L27/108	Informative references	H10B 12/00
G11C11/41	H01L21/8442	Definition statement	H10B 99/00
G11C11/41	H01L27/11	Definition statement	H10B 10/00
G11C16/00	H01L27/115	Informative references	H10B 69/00
G11C16/00	H01L27/115	Informative references	H10B 69/00
G11C16/00	H01L27/115	Informative references	H10B 69/00
G11C17/00	H01L27/112	Informative references	H10B 20/00
H01L21/77	H01L27/10844	Limiting references	H10B 12/01
H01L21/77	H01L27/1052	Special rules	H10B 99/00
H01L21/77	H01L27/10844	Special rules	H10B 12/01
H01L21/77	H01L27/11	Special rules	H10B 10/00
H01L21/77	H01L27/112	Special rules	H10B 20/00
H01L21/77	H01L27/115	Special rules	H10B 69/00
H01L23/3178	H01L27/108	Limiting references	H10B 12/00
H01L27/13	H01L27/108	Informative references	H10B 12/00

NOTES:

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