

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

CLASSIFICATION ORDER 1871

NOVEMBER 6, 2007

PROJECT E-6497

The following classification changes will be effected by this order:

	<u>Class</u>	<u>Subclass</u>	<u>Ex'r Search Room</u>	<u>Art Unit</u>
Abolished:	360	92, 96.5, 96.6, 119, 120, 123-127	2627	RND0000B15
Established:	360	92.1, 96.51, 96.61, 119.01-119.09, 119.1, 119.11-119.13, 123.01-123.09, 123.1, 123.11-123.19, 123.2, 123.21-123.29, 123.3, 123.31-123.39, 123.4, 123.41-123.49, 123.5, 123.51-123.59, 123.6, 123.61, 125.01-125.09, 125.1, 125.11-125.19, 125.2, 125.21-125.29, 125.3, 125.31-125.39, 125.4, 125.41-125.49, 125.5, 125.51-125.59, 125.6, 125.61-125.69, 125.7, 125.71-125.75	2627	RND0000B15
Indent Change:	360	121	2627	RND0000B15

The following class is also impacted by this order:

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This order includes the following:

- A. CLASSIFICATION MANUAL CHANGES
- B. LISTING OF PRINCIPAL SOURCE OF ESTABLISHED AND DISPOSITION OF ABOLISHED SUBCLASSES
- C. CHANGES TO THE USPC-TO-IPC CONCORDANCE
- D. DEFINITION CHANGES AND NEW OR ADDITIONAL DEFINITIONS

CLASSIFICATION ORDER 1871

NOVEMBER 6, 2007

PROJECT E-6497

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Reviewer: Yen Nguyen
Editor: Elma La Touche
Editorial Assistant: Yvonne Smith

NOVEMBER 2007

This Class 360 is considered to be an integral part of Class 369 (see the Class 369 schedule for the position of this Class in schedule hierarchy). This Class retains all pertinent definitions and class lines of Class 369.

1	RECORDING ON OR REPRODUCING FROM AN ELEMENT OF DIVERSE UTILITY	50	.Inter-record gap processing
	.Card	51	.Data clocking
2		52	..With incremental movement between record and head
3	.Motion picture film		
4	MANUAL INPUT RECORDING	53	.Data verification
5	RECORDING FOR SELECTIVE RETENTION OF A SPECIAL OCCURRENCE	54	.Data recirculation.
		55	GENERAL RECORDING OR REPRODUCING
6	RECORDING COMBINED WITH METERING OR SENSING	57	.Selective erase recording
		58	.Boundary displacement recording or transducers
7	RECORDING FOR MONETARY DELAY OF AN ANALOG SIGNAL		
		59	.Thermomagnetic recording or transducers
8	RECORDING FOR CHANGING DURATION, FREQUENCY OR REDUNDANT CONTENT OF AN ANALOG SIGNAL	60	.Recording-or erasing-prevention
		61	.Signal switching
		62	..Record-reproduce
12	RECORDING OR REPRODUCING FOR AUTOMATIC ANNOUNCING	63	..Between plural stationary heads
		64	..Between heads in alternate engagement with medium
13	RECORD EDITING		
15	RECORD COPYING		
	.Contact transfer	65	.Specifics of equalizing
16		66	.Specifics of biasing or erasing
17	..With magnetic bias	67	.Specifics of the amplifier
18	RECORDING OR REPRODUCING PLURAL INFORMATION SIGNALS ON THE SAME TRACK	68	..Recording amplifier
	.Frequency multiplex	69	AUTOMATIC CONTROL OF A RECORDER MECHANISM
20			
21	.Head gap azimuth multiplex	70	.Synchronizing moving-head moving-record recorders
22	SPLITTING ONE INFORMATION SIGNAL FOR RECORDING ON PLURAL DISTINCT TRACKS OR REPRODUCING SUCH SIGNAL		
		71	.Controlling the record
23	.Time division	72.1	..Locating specific areas
		72.2	...Responsive to recorded address
24	SPLITTING, PROCESSING AND RECOMBINING ONE INFORMATION SIGNAL FOR RECORDING OR REPRODUCING ON THE SAME TRACK	72.3	...Responsive to tape transport
		73.01	..Speed
25	CHECKING RECORD CHARACTERISTICS OR MODIFYING RECORDING SIGNAL FOR CHARACTERISTIC COMPENSATION	73.02	...Control of relative speed between carriers
		73.03	...Rotary carrier
26	ELECTRONICALLY CORRECTING PHASING ERRORS BETWEEN RELATED INFORMATION SIGNALS	73.04	...Linear carrier
		73.05	....Plural speed transport
27	RECORDING OR REPRODUCING AN INFORMATION SIGNAL AND A CONTROL SIGNAL FOR CONTROLLING ELECTRONICS OF REPRODUCER	73.06	.....Automatic change between fixed speeds
		73.07	.....Automatic selection of carrier or track speed
28	.Reference carrier to control demodulator	73.08	.....Variable speed
29	MODULATING OR DEMODULATING	73.09	....Constant speed
30	.Frequency	73.11	.....By reproduced control signal and transport derived signal
31	MONITORING OR TESTING THE PROGRESS OF RECORDING		
		73.12	.....By reproduced control signal
32	CONVERTING AN ANALOG SIGNAL TO DIGITAL FORM FOR RECORDING; REPRODUCING AND RECONVERTING	73.13	.....From separate track
		73.14	.....By signal derived from transport
39	GENERAL PROCESSING OF A DIGITAL SIGNAL	74.1	..Stopping or reversing
40	.In specific code or form	74.2	...Responsive to reel rotation
41	..Nonreturn to zero	74.3	...Responsive to tape tension
42	..Phase code	74.4	...Responsive to magnetic recorded signals
43	..Multi-frequency		
44	..Intra-cell transition		
45	.Pulse crowding correction		
46	.Head amplifier circuit		
47	.Redundant or complimentary tracks		
48	.Data in specific format		
49	.Address coding		

Title Change
* Newly Established Subclass

@ Indent Change
& Position Change

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	AUTOMATIC CONTROL OF A RECORDER	89	.Wire record
	MECHANISM	90	.Tape record
	.Controlling the record	91	..Plural tapes
	..Stopping or reversing	* 92.1	...Tape in container
74.5	...Responsive to physical property of record	93	..Tape in container
74.6	....Photoelectric	94	...Transport accommodates different types
74.7	....Conductive	95	...With tape extraction
75	.Controlling the head	96.1	...Plural reels
76	..Azimuth or skew	96.2	....With dual capstan drive
77.01	..Track centering	96.3	....Reel drive details
77.02	...Rotary carrier	96.4	....With common capstan drive
77.03	....By nonmagnetic sensing (e.g., optical, capacitive)	* 96.51	...Container mounting details
77.04	....By memory storage of repeatable error or correction	* 96.61	....With pivotal holder
77.05	....By servo signal component from carrier surface separate from information signal bearing surface	97.01	.Disk record
		97.02	..Environmental control (e.g., air filter, temperature control)
		97.03	...Plural disks
		97.04	...Flexible disk
77.06	....Reproduced data signal used for tracking	98.01	..Plural disks
77.07	....By tracking signal recorded on or immediately beneath surface	98.02	...Axially fixed flexible disks
		98.03	...With pneumatic partitioning of disks
		98.04	...Changer
77.08	.....Distinct servo sector	98.05	....Control detail
77.11	.....Continuous servo signal	98.06	....Mechanical detail
77.12	...Elongated web carrier (i.e., tape)	98.07	...Rotational drive detail
77.13	...Transverse scan path	98.08	...Seating of disks
77.14	.....By pilot signal	99.01	..Flexible disk
77.15	.....Plural pilot signals along single transverse path	99.02	...Loading or ejecting mechanism
77.16	.....Having head deflection drive (e.g., piezoelectric bimorph)	99.03	...Motorized
		99.04	...Rotational drive detail
		99.05	...Disk seating
77.17	.....Dithering	99.06	..Loading or ejecting mechanism
78.01	..Track changing	99.07	...Motorized
78.02	..Tape	99.08	..Rotational drive detail
78.03	...Plural tapes	99.09	...Movable drive
78.04	...For rotary carrier (e.g., disc)	99.11	...Stationary drive
78.05	...Coarse and fine head drive motors	99.12	..Disk seating
78.06	....Specified velocity pattern during access	100.1	.Drum record
		101	HEAD TRANSPORT WITH RECORD STATIONARY DURING TRANSDUCING
78.07	.....Controlled by memory device	220	FLUID BEARING RECORD SUPPORT
78.08	....Specified spatial pattern during access	221	.Tape record
78.09	....Including model of servo system or element	221.1	..Liquid bearing
		224	.Disk record
78.11	....Including nonmagnetic position sensing	230	FLUID BEARING HEAD SUPPORT
78.12	....Including particular head actuator	231	.Tape record
78.13	.....Stepping motor	234	.Disk record
78.14	....By recorded servo reference or address signal	234.1	..Liquid bearing
		234.2	..Flexible disk
78.15	....Drum	234.3	..Air bearing slider detail
79	RECORDER CONTROL OF AN EXTERNAL DEVICE	234.4	...IC/circuit component on slider
80	.Slide or movie projectors	234.5	...Electrical attachment of slider/head
81	RECORD TRANSPORT WITH HEAD MOVING DURING TRANSDUCING	234.6	...Mechanical attachment of slider to its support
82	.Belt record	234.7	...Head attachment to slider
83	.Tape record	234.8	....On/in side of slider
84	..Rotating head	234.9	....In slot of rail
85	...Tape in container	235	....Signal winding mount/access detail
86	.Disk record	235.1	...Slider material
87	.Drum record		
88	RECORD TRANSPORT WITH HEAD STATIONARY DURING TRANSDUCING		

Title Change
* Newly Established Subclass

@ Indent Change
& Position Change

CLASS 360 DYNAMIC MAGNETIC INFORMATION STORAGE OR RETRIEVAL

NOVEMBER 2007

	FLUID BEARING HEAD SUPPORT	261	..Tape record having rotary head movement
	.Disk record		
	..Air bearing slider detail	261.1	..Tape record having linear head movement
	...Slider material		
235.2	....Rail material	261.2	...Cam
235.3	....Body material	261.3	...Screw
235.4	...Air bearing surface detail	264	..Disk record
235.5	...Negative pressure type	264.1	...Arcuate head movement
235.6	....Leading end detail	264.2	....Electrical connection detail onto actuator arm
235.7	....Trailing end detail		
235.8	....Rail surface detail	264.3	....Driver detail
235.9	....Rail side edge detail	264.4	.....Independent head movement
236	....Cross rail detail	264.5	.....Plural drivers for each head
236.1	....Varying width rail	264.6	....Band
236.2	....Asymmetrical rail arrangement	264.7	....Voice coil
236.3	....Three or more rails/pads	264.8	.....Core detail
236.4	....Leading end detail	264.9	.....Magnet detail
236.5	....Trailing end detail	265	.....Winding detail
236.6	....Rail surface detail	265.1	....Limiter/stop
236.7	....Rail side edge detail	265.2	....Bearing
236.8	....Varying width rail	265.3	....Seal
236.9	....Asymmetrical rail arrangement	265.4	....Radial
237	....Three or more rails/pads	265.5	....Thrust
237.1	....Partial contact	265.6	....Mounting detail
240	HEAD MOUNTING	265.7	....E block detail
250	.For moving head into/out of transducing position	265.8	....Detail of coil support
		265.9	....Detail of actuator arm supporting head suspension
251	..Tape record having arcuate head retraction movement	266	.....Arm shape
251.1	..Tape record having linear head retraction movement	266.1	.....Arm mounting
251.2	...Driven by tape driver	266.2	...Linear head movement
251.3	...Cam type	266.3	...Electrical connection detail onto actuator arm
251.4	...Solenoid type	266.4	...Voice coil
251.5	...Rotary head type	266.5	....Carriage detail
254	..Disk record	266.6	.....Guide detail
254.1	...Flexible disk	266.7	....Core detail
254.2	...Arcuate track change type	266.8	....Magnet detail
254.3	...Moving lifter	266.9	....Winding detail
254.4	....Lifter surface detail	267	....Band
254.5	.....Adjustment detail	267.1	....Cam
254.6	....Actuator side detail	267.2	....Rack
254.7	....Fixed lifter	267.3	....Screw
254.8	....Lifter surface detail	267.4	.....Screw/follower detail
254.9	....Adjustment detail	267.5	....Carriage detail
255	.....Actuator side detail	267.6	.....Guide detail
255.1	...Linear track change type	267.7	....Screw mount detail
255.2	...Moving lifter	267.8	.....Adjustable
255.3	....Lifter surface detail	267.9	...Including shifting head to different disks
255.4	....Adjustment detail		
255.5	....Actuator side detail	270	.For moving head during transducing
255.6	....Fixed lifter	271	..Tape record having rotary head
255.7	....Lifter surface detail	271.1	...Rotating drum
255.8	....Adjustment detail	271.2	....Axle bearing
255.9	....Actuator side detail	271.3	....Hydrodynamic
256	...Latch	271.4	....Axle seal
256.1	....Air vane	271.5	...Head mount to drum
256.2	....Magnetic	271.6	....Drum mounting
256.3	....Electrically driven	271.7	....Drum motor
256.4	....Inertial	271.8	...Stationary drum
256.5	....Plural latches	271.9	....Electrical connection detail
256.6	....Adjustment detail		
260	.For shifting head between tracks		

Title Change
* Newly Established Subclass

@ Indent Change
& Position Change

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	HEAD MOUNTING	245.6	...Plural axis components
	.For moving head during transducing	245.7	...Motion limiter detail
	..Tape record having rotary head	245.8	..Electrical connection detail
272	...Power supply	245.9	...Flexible printed circuit type
281	...Signal transfer to/from head	246	...Noise reduction
281.1	....Transformer mounting detail	246.1	..Full contact suspension
281.2	....Transformer axis parallel to axis of head rotation	246.2	...Slider detail
		246.3	...Pivot detail
281.3	....Transformer axis perpendicular to axis of head rotation	246.4	...Gimbal detail
		246.5	...Single head
281.4	....Coil/winding detail	246.6	..Plural heads for each disk side
281.5	....Core detail	246.7	...Plural actuators
281.6	....Electrical or magnetic shielding	246.8	..Offset heads on opposite sides of disk
281.7	....Electrical connection between head and rotary part of transformer	110	HEAD
		111	.Flux gate
281.8	....Plural transformers	112	.Hall effect
281.9	....Photoelectric	313	.Magnetoresistive (MR) reproducing head
282	....Contact type transformer	314	..Having multiple interconnected multiple film MR sensors (e.g., dual spin valve magnetoresistive sensor)
274	..Disk record		
290	.For adjusting head position		
291	..Tape record		
291.1	...Cam adjuster	315	..Having multiple interconnected single film MR sensors (e.g., dual magnetoresistive sensor)
291.2	...Screw adjuster		
291.3	...Plural screws		
291.4	...Rotary head	316	..Having multiple independent MR sensors
291.5	....Adjustment of drum axis	317	..Combined with inductive write head in piggyback/merged configuration
291.6	....Adjustable head mount		
291.7	.....Adjuster core detail	318	..Combined with inductive write head and having MR inside of inductive head
291.8	.....Adjuster coil detail		
291.9	.....Piezoelectric adjuster	318.1	...In horizontal head configuration
292	.....Plural piezoelectric adjusters	319	..Detail of magnetic shielding
294	..Disk record	320	..Detail of head insulation
294.1	...Adjustment parallel to disk plane	321	..Having flux guide detail
294.2	...Linear adjustment	322	..Detail of sense conductor
294.3	...Driver detail	323	..Electrostatic Discharge (ESD) protection
294.4	.....Piezoelectric adjuster		
294.5	.....Voice coil adjuster	324	..Having Giant Magnetoresistive (GMR) or Colossal Magnetoresistive (CMR) sensor formed of multiple thin films
294.6	...Pivot structure detail		
294.7	...Adjustment along rotational axis of disk	324.1	...Having one film pinned (e.g., spin valve)
241	.Tape record		
241.1	..Plural head mounting on only one tape side	324.11	...Detail of pinned film or additional film for affecting or biasing the pinned film
241.2	..Plural head mounting on opposite tape sides	324.12	...Detail of free layer or additional film for affecting or biasing the free layer
241.3	..Head urging detail		
244	.Disk record		
244.1	..IC/circuit component on suspension element	324.2	...Having tunnel junction effect
		325	..Having Anisotropic Magnetoresistive (AMR) sensor formed of multiple thin films
244.2	..Load beam detail		
244.3	...Laminated beam		
244.4	...Nonmetallic beam	326	..Having Giant Magnetoresistive (GMR) or Colossal Magnetoresistive (CMR) sensor formed of a single thin film
244.5	...Actuator mount region detail		
244.6	....Ball staking		
244.7	....Adhesive	327	..Having Anisotropic Magnetoresistive (AMR) sensor formed of a single thin film
244.8	...Spring region detail		
244.9	...Rigid intermediate section detail	327.1	...Detail of transverse and longitudinal biasing
245	...Gimbal mounting region detail		
245.1	....Pivot/load button detail	327.11	....In barber-pole configuration
245.2	...Assembly feature	327.2	...Detail of transverse biasing
245.3	..Gimbal detail	327.21	....Using a shunt
245.4	...Attachment detail		
245.5	...Integral with load beam		

Title Change
* Newly Established Subclass

@ Indent Change
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	HEAD		
	.Magnetoresistive (MR) reproducing head	* 123.18	...Single plane coil
	..Having Anisotropic Magnetoresistive (AMR) sensor formed of a single thin film	* 123.19Configuration detail
	...Detail of transverse biasing	* 123.2	.....Trace cross section shape
327.22	....Using a soft adjacent layer	* 123.21	.....Trace spacing
327.23	....Using a permanent magnet	* 123.22	.....Coil spacing from storage medium
327.24	....Using conductor	* 123.23	.....Coil spacing from plane of gap
327.3	...Detail of longitudinal biasing	* 123.24	....Seed layer
327.31	....Using a permanent magnet	* 123.25	....Insulation detail
327.32	....Using exchange couple biasing	* 123.26	.....Zero throat height detail
327.33	....Using conductor	* 123.27	.....Apex angle
328	.Magnetostrictive head	* 123.28	.....Plural layers
114.01	.Read only detector using light for reading magnetically recorded information on tape	* 123.29	.....Diverse materials
	..Light beam generator detail	* 123.3	.....Planarizing layer
114.02	...Focus detail	* 123.31	.....Below coil
114.03	..Beam splitter detail	* 123.32	.....Above coil
114.04	..Readout detector detail	* 123.33	.....Between traces
114.05	...Focus detail	* 123.34	.....Between coil and medium
114.06	...Circuit detail	* 123.35	....Plural diverse layers
114.07	...Detector material detail	* 123.36	....Electrical connection detail
114.08	...Mounting detail	* 123.37	....Shielding/protection
114.09	..Rotary head	* 123.38	...Plural plane coil
115	.Flux scanning	* 123.39	....Intercoil layer electrical connection detail
116	.Cathode ray	* 123.4	....Configuration detail
117	.Hand-held	* 123.41	.....Trace cross section shape
118	.Erase	* 123.42	.....Trace spacing
# 121	.Plural gaps	* 123.43	.....Coil spacing from storage medium
* 119.01	.Gap spacer	* 123.44	.....Coil spacing from plane of gap
* 119.02	..For perpendicular recording head	* 123.45	....Seed layer
* 119.03	...Laminated spacer	* 123.46	....Insulation detail
* 119.04	...Configuration detail	* 123.47	.....Zero throat height detail
* 119.05	..For longitudinal thin film recording head	* 123.48	.....Apex angle
* 119.06	...Pancake type	* 123.49	.....Plural layers
* 119.07	...Laminated spacer	* 123.5	.....Diverse materials
* 119.08	....With thermally conductive material	* 123.51	.....Planarizing layer
* 119.09	....With diffusion barrier	* 123.52	.....Below coil
* 119.1	....Three or more layers	* 123.53	.....Above coil
* 119.11	...Configuration detail	* 123.54	.....Between traces
* 119.12	...Nonuniform width transducing face	* 123.55	.....Between coil and medium
* 119.13	...Nonuniform width vertically	* 123.56	....Plural diverse layers
122	.Head surface structure	* 123.57	....Electrical connection detail
* 123.01	.Coil	* 123.58	....Shielding/protection
* 123.02	..For perpendicular recording head	* 123.59	...Location
* 123.03	...Location	* 123.6	....Coil around pole adjacent substrate
* 123.04	....On return pole	* 123.61	....Coil around pole remote from substrate
* 123.05	....On main/recording pole	* 125.01	.Core
* 123.06	...Configuration detail	* 125.02	..Perpendicular recording head
* 123.07	....Nonuniform trace spacing	* 125.03	...Main/recording pole
* 123.08	....Trace cross section shape	* 125.04	....Plural poles
* 123.09	...Insulation detail	* 125.05	....Offset from track centerline
* 123.1	...Electrical connection detail	* 125.06	....Separate pole tip
* 123.11	...Plural separate coils	* 125.07	.....Junction detail
* 123.12	...Shielding/protection	* 125.08	.....Laminated
* 123.13	..For longitudinal recording head	* 125.09	.....Nonuniform width transducing face
* 123.14	...Pancake type	* 125.1	.....Nonuniform width vertically
* 123.15	....Plural coil layers	* 125.11	.....Nonuniform thickness vertically
* 123.16	....Insulation detail	* 125.12	....Laminated
* 123.17Plural separate coils	* 125.13Nonuniform width transducing face
		* 125.14Nonuniform width vertically

Title Change
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HEAD			
.Core		* 125.73Laminated
..Perpendicular recording head		* 125.74Heat generating structure
...Main/recording pole		* 125.75	....Heat transfer structure
* 125.15	...Nonuniform thickness vertically	128	.Head accessory
* 125.16	...Return pole	129	..Housing
* 125.17	....Plural poles	130.1	..Record separator
* 125.18	....Offset from track centerline	130.2	..Record guide
* 125.19	....Nonuniform width transducing face	130.21	...Tape record
* 125.2	....Nonuniform width vertically	130.22	....Rotating head
* 125.21	....Nonuniform thickness vertically	130.23	....Helical scan
* 125.22	....Separate pole tip	130.24	.....Head drum details
* 125.23	.....Junction detail	130.3	..Pressure element
* 125.24	.....Laminated	130.31	...Tape record
* 125.25	.....Configuration detail	130.32	....Element mounting details
* 125.26	....Laminated	130.33	....Element in tape container
* 125.27	...Coupling section	130.34	..Disc record
* 125.28	....Laminated	131	RECORD MEDIUM
* 125.29	...Junction detail	132	.In container
* 125.3	...Accessory feature	133	..For disk
* 125.31	....Heat generating structure	134	.Tape
* 125.32	....Heat transfer structure	135	.Disk
* 125.33	..Thin film longitudinal recording head	136	.Drum
* 125.34	...Pancake type	137	MISCELLANEOUS
* 125.35	....Core section adjacent medium		*****
* 125.36	....Back core section remote from medium		CROSS-REFERENCE ART COLLECTIONS
* 125.37	....Coupling section		*****
* 125.38	...Substrate	900	DISK DRIVE PACKAGING
* 125.39	....Laminated	901	.Access time
* 125.4	....Nonuniform thickness vertically	902	.Storage density (e.g., bpi, tpi)
* 125.41	...Pole adjacent substrate	903	.Physical parameter (e.g., form factor)
* 125.42	....Zero throat height detail	904	..Weight
* 125.43	....Separate pole tip		*****
* 125.44	.....Junction detail		FOREIGN ART COLLECTIONS
* 125.45	.....Laminated		*****
* 125.46	....Nonuniform width transducing face	FOR 000	CLASS-RELATED FOREIGN DOCUMENTS
* 125.47	....Nonuniform width vertically		
* 125.48	....Nonuniform thickness vertically		
* 125.49	....Projecting		
* 125.5	....Laminated		
* 125.51	....Nonuniform width transducing face		
* 125.52	....Nonuniform width vertically		
* 125.53	....Nonuniform thickness vertically		
* 125.54	...Pole remote from substrate		
* 125.55	....Zero throat height detail		
* 125.56	....Separate pole tip	FOR 202	FLUID BEARING HEAD (360/102)
* 125.57	.....Junction detail	FOR 203	.Flying head (360/103)
* 125.58	.....Laminated	FOR 204	HEAD MOUNTING (360/104)
* 125.59	.....Nonuniform width transducing face	FOR 205	..For moving head into and out of transducing position (360/105)
* 125.6	.....Nonuniform width vertically	FOR 206	..For shifting head between tracks (360/106)
* 125.61	.....Nonuniform thickness vertically	FOR 207	..For moving head during transducing (360/107)
* 125.62	.....Projecting	FOR 208	..Signal transfer to and from head (360/108)
* 125.63	....Laminated	FOR 209	..For adjusting head position (360/109)
* 125.64	....Nonuniform width transducing face	FOR 213	MAGNETORESISTIVE OR MAGNETOSTRICTIVE HEAD (360/113)
* 125.65	....Nonuniform width vertically		HEAD (340/110)
* 125.66	....Nonuniform thickness vertically	FOR 214	.Magneto optic (360/114)
* 125.67	...Coupling section		
* 125.68	...Junction detail		
* 125.69	....Laminated		
* 125.7	....Nonuniform cross section		
* 125.71	...Accessory feature		
* 125.72	....Protective structure		

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

Title Change
* Newly Established Subclass

@ Indent Change
& Position Change

NOVEMBER 6, 2007

PROJECT E-6497

SOURCE CLASSIFICATION(S) OF PATENTS
IN NEWLY ESTABLISHED SUBCLASSES REPORT

Generated by Data Control Division

<u>New Classification</u>	<u>Number of ORs</u>	<u>Source Classification</u>	<u>Number of ORs</u>
360/118	1	360/127	41
360/119.01	83	360/119	173
	32	360/120	90
	3	360/125	292
	2	360/126	784
360/119.02	3	360/119	173
	1	360/120	90
	1	360/125	292
360/119.03	2	360/120	90
	1	360/125	292
	1	360/126	784
360/119.04	1	360/119	173
	2	360/120	90
	1	360/125	292
360/119.05	2	360/119	173
	1	360/124	25
	4	360/125	292
	4	360/126	784
360/119.06	1	360/119	173
360/119.07	13	360/119	173
	22	360/120	90
	1	360/123	215
	3	360/125	292
	19	360/126	784
360/119.08	1	360/120	90
	1	360/123	215
360/119.09	1	360/119	173
	5	360/120	90
360/119.1	1	360/119	173
	1	360/120	90
	8	360/126	784
360/119.11	15	360/119	173
	10	360/120	90
	4	360/125	292
	4	360/126	784
360/119.12	7	360/119	173
360/119.13	1	360/119	173
360/122	2	360/125	292
360/123.01	92	360/123	215
	21	360/124	25
	17	360/125	292
	3	360/126	784
360/123.02	3	360/123	215

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SOURCE CLASSIFICATION(S) OF PATENTS
IN NEWLY ESTABLISHED SUBCLASSES REPORT

Generated by Data Control Division

<u>New Classification</u>	<u>Number of ORs</u>	<u>Source Classification</u>	<u>Number of ORs</u>
360/123.03	1	360/123	215
360/123.03	1	360/125	292
360/123.04	1	360/123	215
360/123.05	3	360/123	215
	1	360/125	292
	1	360/126	784
360/123.06	1	360/123	215
	1	360/125	292
360/123.07	1	360/125	292
360/123.09	3	360/126	784
360/123.1	1	360/126	784
360/123.11	5	360/123	215
	2	360/125	292
360/123.12	1	360/123	215
	1	360/125	292
360/123.13	3	360/125	292
	1	360/126	784
360/123.17	4	360/119	173
	13	360/123	215
	4	360/125	292
	2	360/126	784
360/123.18	1	360/119	173
	2	360/123	215
	1	360/125	292
360/123.19	5	360/123	215
	2	360/125	292
	3	360/126	784
360/123.2	3	360/123	215
	2	360/126	784
360/123.21	1	360/123	215
	1	360/126	784
360/123.23	3	360/126	784
360/123.24	3	360/126	784
360/123.25	2	360/123	215
	1	360/125	292
	6	360/126	784
360/123.26	5	360/126	784
360/123.27	5	360/126	784
360/123.28	2	360/126	784
360/123.29	1	360/126	784
360/123.3	1	360/126	784
360/123.31	1	360/126	784
360/123.33	1	360/123	215

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SOURCE CLASSIFICATION(S) OF PATENTS
IN NEWLY ESTABLISHED SUBCLASSES REPORT

Generated by Data Control Division

<u>New</u> <u>Classification</u>	<u>Number</u> <u>of ORs</u>	<u>Source</u> <u>Classification</u>	<u>Number</u> <u>of ORs</u>
360/123.35	1	360/123	215
360/123.36	8	360/123	215
360/123.36	7	360/126	784
360/123.37	1	360/123	215
	2	360/126	784
360/123.38	4	360/123	215
	2	360/126	784
360/123.39	20	360/123	215
	5	360/126	784
360/123.4	7	360/123	215
	2	360/126	784
360/123.41	7	360/123	215
	1	360/126	784
360/123.42	1	360/123	215
360/123.43	1	360/126	784
360/123.45	1	360/123	215
	1	360/126	784
360/123.47	2	360/126	784
360/123.48	1	360/126	784
360/123.49	2	360/126	784
360/123.5	1	360/123	215
	2	360/126	784
360/123.52	1	360/123	215
360/123.57	1	360/125	292
	1	360/126	784
360/123.6	1	360/126	784
360/123.61	1	360/126	784
360/125.01	11	360/119	173
	1	360/120	90
	1	360/123	215
	1	360/124	25
	114	360/125	292
	71	360/126	784
	39	360/127	41
360/125.02	8	360/125	292
	4	360/126	784
360/125.03	19	360/125	292
	11	360/126	784
360/125.04	1	360/119	173
	2	360/125	292
	8	360/126	784
360/125.05	2	360/126	784

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IN NEWLY ESTABLISHED SUBCLASSES REPORT

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<u>New Classification</u>	<u>Number of ORs</u>	<u>Source Classification</u>	<u>Number of ORs</u>
360/125.06	2	360/125	292
	9	360/126	784
360/125.07	3	360/126	784
360/125.08	1	360/119	173
360/125.08	1	360/125	292
360/125.09	3	360/125	292
	1	360/126	784
360/125.1	1	360/120	90
	2	360/126	784
360/125.12	1	360/119	173
	1	360/124	25
	11	360/125	292
	30	360/126	784
360/125.13	1	360/119	173
	9	360/125	292
	3	360/126	784
360/125.14	1	360/119	173
	2	360/125	292
	1	360/126	784
360/125.15	7	360/125	292
	2	360/126	784
360/125.16	2	360/125	292
	1	360/126	784
360/125.17	1	360/119	173
	3	360/125	292
	1	360/126	784
360/125.21	1	360/125	292
360/125.22	1	360/119	173
	1	360/125	292
	1	360/126	784
360/125.25	1	360/123	215
360/125.27	1	360/125	292
	3	360/126	784
	1	360/127	41
360/125.28	1	360/126	784
360/125.3	1	360/123	215
	2	360/125	292
	8	360/126	784
360/125.31	2	360/125	292
	4	360/126	784
360/125.32	1	360/126	784

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<u>New Classification</u>	<u>Number of ORs</u>	<u>Source Classification</u>	<u>Number of ORs</u>
360/125.33	2	360/119	173
	1	360/123	215
	4	360/125	292
	30	360/126	784
360/125.34	1	360/119	173
	8	360/126	784
360/125.35	2	360/125	292
360/125.35	12	360/126	784
360/125.36	1	360/126	784
360/125.37	3	360/126	784
360/125.38	3	360/125	292
	9	360/126	784
360/125.39	1	360/123	215
	1	360/125	292
	23	360/126	784
360/125.4	1	360/125	292
	8	360/126	784
360/125.41	3	360/125	292
	23	360/126	784
360/125.42	3	360/119	173
	2	360/123	215
	22	360/126	784
360/125.43	1	360/120	90
	2	360/123	215
	1	360/125	292
	51	360/126	784
360/125.44	2	360/119	173
	1	360/120	90
	17	360/126	784
360/125.45	13	360/126	784
360/125.46	1	360/123	215
	7	360/126	784
360/125.47	1	360/126	784
360/125.5	1	360/119	173
	2	360/123	215
	3	360/125	292
	58	360/126	784
360/125.51	2	360/120	90
	1	360/125	292
	29	360/126	784
360/125.52	2	360/125	292
	18	360/126	784

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<u>New Classification</u>	<u>Number of ORs</u>	<u>Source Classification</u>	<u>Number of ORs</u>
360/125.53	3	360/119	173
	3	360/123	215
	3	360/125	292
	20	360/126	784
360/125.54	2	360/119	173
	2	360/123	215
	10	360/126	784
360/125.55	1	360/119	173
	5	360/126	784
360/125.56	22	360/126	784
360/125.57	5	360/126	784
360/125.61	1	360/119	173
	2	360/126	784
360/125.62	5	360/126	784
360/125.63	17	360/126	784
360/125.64	1	360/119	173
	10	360/126	784
360/125.65	22	360/126	784
360/125.66	2	360/119	173
	5	360/126	784
360/125.67	3	360/126	784
360/125.68	8	360/126	784
360/125.69	1	360/126	784
360/125.71	1	360/123	215
	9	360/126	784
360/125.72	1	360/125	292
	9	360/126	784
360/125.73	1	360/126	784
360/125.74	2	360/120	90
	1	360/126	784
360/125.75	1	360/123	215
	7	360/126	784
360/92.1	1	360/125	292
	1	360/126	784
	471	360/92	478
	1	360/96.5	434
360/96.4	6	360/92	478
360/96.51	1	360/125	292
	432	360/96.5	434
360/96.61	1	360/92	478
	1	360/96.5	434
	77	360/96.6	77

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<u>Source Classification</u>	<u>Number of ORs</u>	<u>New Classification</u>	<u>Number of ORs</u>
360/119	173	360/119.01	83
		360/119.02	3
		360/119.04	1
		360/119.05	2
		360/119.06	1
		360/119.07	13
		360/119.09	1
		360/119.1	1
		360/119.11	15
		360/119.12	7
		360/119.13	1
		360/123.17	4
		360/123.18	1
		360/125.01	11
		360/125.04	1
		360/125.08	1
		360/125.12	1
		360/125.13	1
		360/125.14	1
		360/125.17	1
		360/125.22	1
		360/125.33	2
		360/125.34	1
		360/125.42	3
		360/125.44	2
		360/125.5	1
		360/125.53	3
		360/125.54	2
		360/125.55	1
		360/125.61	1
		360/125.64	1
		360/125.66	2
360/120	90	360/119.01	32
		360/119.02	1
		360/119.03	2
		360/119.04	2
		360/119.07	22
		360/119.08	1
		360/119.09	5
		360/119.1	1
		360/119.11	10
		360/125.01	1
		360/125.1	1

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<u>Source Classification</u>	<u>Number of ORs</u>	<u>New Classification</u>	<u>Number of ORs</u>
		360/125.43	1
		360/125.44	1
		360/125.51	2
360/120	90	360/125.74	2
360/123	215	360/119.07	1
		360/119.08	1
		360/123.01	92
		360/123.02	3
		360/123.03	1
		360/123.04	1
		360/123.05	3
		360/123.06	1
		360/123.11	5
		360/123.12	1
		360/123.17	13
		360/123.18	2
		360/123.19	5
		360/123.2	3
		360/123.21	1
		360/123.25	2
		360/123.33	1
		360/123.35	1
		360/123.36	8
		360/123.37	1
		360/123.38	4
		360/123.39	20
		360/123.4	7
		360/123.41	7
		360/123.42	1
		360/123.45	1
		360/123.5	1
		360/123.52	1
		360/125.01	1
		360/125.25	1
		360/125.3	1
		360/125.33	1
		360/125.39	1
		360/125.42	2
		360/125.43	2
		360/125.46	1
		360/125.5	2
		360/125.53	3
		360/125.54	2
		360/125.71	1

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<u>Source Classification</u>	<u>Number of ORs</u>	<u>New Classification</u>	<u>Number of ORs</u>
360/124	25	360/125.75	1
		360/119.05	1
		360/123.01	21
		360/125.01	1
		360/125.12	1
360/125	292	360/119.01	3
		360/119.02	1
		360/119.03	1
		360/119.04	1
		360/119.05	4
		360/119.07	3
		360/119.11	4
		360/122	2
		360/123.01	17
		360/123.03	1
		360/123.05	1
		360/123.06	1
		360/123.07	1
		360/123.11	2
		360/123.12	1
		360/123.13	3
		360/123.17	4
		360/123.18	1
		360/123.19	2
		360/123.25	1
		360/123.57	1
		360/125.01	114
		360/125.02	8
		360/125.03	19
		360/125.04	2
		360/125.06	2
		360/125.08	1
		360/125.09	3
		360/125.12	11
		360/125.13	9
		360/125.14	2
		360/125.15	7
		360/125.16	2
		360/125.17	3
		360/125.21	1
		360/125.22	1
		360/125.27	1
		360/125.3	2
		360/125.31	2

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DISPOSITION CLASSIFICATION(S) OF PATENTS
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Generated by Data Control Division

<u>Source Classification</u>	<u>Number of ORs</u>	<u>New Classification</u>	<u>Number of ORs</u>	
		360/125.33	4	
		360/125.35	2	
		360/125.38	3	
		360/125.39	1	
		360/125.4	1	
		360/125.41	3	
360/125.43	1360/126	784	360/125.01	71
			360/125.02	4
			360/125.03	11
			360/125.04	8
			360/125.05	2
			360/125.06	9
			360/125.07	3
			360/125.09	1
			360/125.1	2
			360/125.12	30
			360/125.13	3
			360/125.14	1
			360/125.15	2
			360/125.16	1
			360/125.17	1
			360/125.22	1
			360/125.27	3
			360/125.28	1
			360/125.3	8
			360/125.31	4
			360/125.32	1
			360/125.33	30
			360/125.34	8
			360/125.35	12
			360/125.36	1
			360/125.37	3
			360/125.38	9
			360/125.39	23
			360/125.4	8
			360/125.41	23
			360/125.42	22
			360/125.43	51
			360/125.44	17
			360/125.45	13
			360/125.46	7
			360/125.47	1
			360/125.5	58
			360/125.51	29

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<u>Source Classification</u>	<u>Number of ORs</u>	<u>New Classification</u>	<u>Number of ORs</u>
		360/125.52	18
		360/125.53	20
		360/125.54	10
		360/125.55	5
		360/125.56	22
		360/125.57	5
		360/125.61	2
		360/125.62	5
		360/126	784
		360/125.63	17
		360/125.64	10
		360/125.65	22
		360/125.66	5
		360/125.67	3
		360/125.68	8
		360/125.69	1
		360/125.71	9
		360/125.72	9
		360/125.73	1
		360/125.74	1
		360/125.75	7
360/127	41	360/92.1	1
		360/118	1
		360/125.01	39
		360/125.27	1
360/92	478	360/92.1	471
		360/96.4	6
		360/96.61	1
360/96.5	434	360/92.1	1
		360/96.51	432
		360/96.61	1
360/96.6	77	360/96.61	77

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C. CHANGES TO THE U.S. – I.P.C. CONCORDANCE

<u>Class</u>	<u>U.S.</u>	<u>Subclass</u>	<u>I.P.C.</u>	<u>Notation</u>
360		92.1	G11B	15/68
		96.51	G11B	5/008
		96.61	G11B	5/008
		119.01-119.13	G11B	5/23
		123.01-123.11	G11B	5/17
		123.12	G11B	5/10
			G11B	5/17
		123.13-123.36	G11B	5/17
		123.37	G11B	5/10
				5/115
				5/17
		123.38-123.57	G11B	5/17
		123.58	G11B	5/10
				5/115
				5/17
		123.59-123.61	G11B	5/17
		125.01-125.07	G11B	5/127
		125.08	G11B	5/147
		125.09-125.11	G11B	5/127
		125.12	G11B	5/127
			G11B	5/147
		125.13-125.23	G11B	5/127
		125.24	G11B	5/127
				5/147
		125.25	G11B	5/127
		125.26	G11B	5/127
			G11B	5/147
		125.27	G11B	5/127
		125.28	G11B	5/127
			G11B	5/147
		125.29-125.31	G11B	5/127
		125.32	G11B	5/127
			G11B	5/40
		125.33-125.38	G11B	5/127
		125.39	G11B	5/127
			G11B	5/147
		125.4-125.49	G11B	5/127
		125.5	G11B	5/127
			G11B	5/147
		125.51-125.57	G11B	5/127
		125.58	G11B	5/127
			G11B	5/147

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C. CHANGES TO THE U.S. – I.P.C. CONCORDANCE

<u>Class</u>	<u>U.S.</u>	<u>Subclass</u>	<u>I.P.C.</u>	<u>Notation</u>
		125.59-125.62	G11B	5/127
		125.63	G11B	5/127
			G11B	5/147
		125.64-125.68	G11B	5/127
		125.69	G11B	5/127
			G11B	5/147
		125.70-125.72	G11B	5/127
		125.73	G11B	5/127
			G11B	5/147
		125.74	G11B	5/127
		125.75	G11B	5/127
			G11B	5/40

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D. CHANGES TO THE DEFINITIONS

CLASS 242 -- WINDING, TENSIONING, OR GUIDING

Definitions Modified

Subclass 324.2: Under See or Search Class

Delete:

360, Dynamic Magnetic Information Storage or Retrieval, subclasses 92 through 96.6 and 132 for a magnetic tape cassette.

Insert:

360, Dynamic Magnetic Information Storage or Retrieval, subclasses 92.1 through 96.61 and 132 for a magnetic tape cassette.

Subclass 326: Under See or Search Class

Delete:

360, Dynamic Magnetic Information Storage or Retrieval, subclasses 92 through 96 and 132 for a magnetic tape cassette.

Insert:

360, Dynamic Magnetic Information Storage or Retrieval, subclasses 92.1 through 96.61 and 132 for a magnetic tape cassette.

Subclass 337: Under See or Search Class

Delete:

360, Dynamic Magnetic Information Storage or Retrieval, subclasses 92 through 96.6 for a magnetic tape cassette.

Insert:

360, Dynamic Magnetic Information Storage or Retrieval, subclasses 92.1 through 96.61 for a magnetic tape cassette.

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D. CHANGES TO THE DEFINITIONS

Subclass 338.4: Under See or Search Class

Delete:

360, Dynamic Magnetic Information Storage or Retrieval, subclasses 92 and 93+ for a cartridge device claimed with a particular transducing structure.

Insert:

360, Dynamic Magnetic Information Storage or Retrieval, subclasses 92.1 and 93+ for a cartridge device claimed with a particular transducing structure.

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D. CHANGES TO THE DEFINITIONS

CLASS 360 -- DYNAMIC MAGNETIC INFORMATION STORAGE OR RETRIEVAL

Definitions Abolished

Subclasses:

92, 96.5, 96.6, 119, 120, 123-127

Definitions ModifiedSubclass 121: Delete:

121 This subclass is indented under subclass 119. Subject matter including detailed structure of plural gap transducers.

Insert:

121 Plural gaps:
This subclass is indented under subclass 110. Subject matter includes detailed structure of plural gap transducers.

Definitions Established**92.1 Tape in container:**

This subclass is indented under subclass 91. Subject matter wherein the plural tapes are enclosed in single or plural containers.

96.51 Container mounting details:

This subclass is indented under subclass 96.1. Subject matter includes details of the container mounting mechanism.

(1) Note. This subclass and its indents also include container mounting structure where there is only a nominal recitation of the transport.

SEE OR SEARCH CLASS:

242, Winding, Tensioning, or Guiding, subclasses 338 through 242 and subclass 339 for details of a cartridge mounting.

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D. CHANGES TO THE DEFINITIONS**96.61 With pivotal holder**

This subclass is indented under subclass 96.51. Subject matter wherein the container mounting mechanism includes a pivoted container holder that moves in an arc between a container loading position and a transducing position.

119.01 Gap spacer:

This subclass is indented under subclass 110. Subject matter including a detail of a nonmagnetic element located between poles of a head to define the transducing area.

119.02 For perpendicular recording head:

This subclass is indented under subclass 119.01. Subject matter wherein the transducer is configured to record data in a storage medium by orienting magnetic domains normal to the plane of the storage medium.

- (1) Note. Although this definition refers to the plane of a storage medium, it is understood that media may have a nonplanar macroscopic shape.

119.03 Laminated spacer:

This subclass is indented under subclass 119.02. Subject matter wherein the gap spacer is made up of a plurality of layers.

119.04 Configuration detail:

This subclass is indented under subclass 119.02. Subject matter including a detail of the structural form of the gap spacer.

119.05 For longitudinal thin film recording head:

This subclass is indented under subclass 119.01. Subject matter wherein the transducer comprises a plurality of thin layers and is configured to record data in a storage medium by orienting magnetic domains parallel to the plane of the storage medium.

- (1) Note. Although this definition refers to the plane of the storage medium, it is understood that media may have a nonplanar macroscopic shape.

119.06 Pancake type:

This subclass is indented under subclass 119.05. Subject matter wherein the layers are located in planes parallel to the plane of the storage medium.

119.07 Laminated spacer:

This subclass is indented under subclass 119.05. Subject matter wherein the gap spacer is made up of a plurality of layers.

- (1) Note. Metal in gap (MIG) can be found in this subclass.

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D. CHANGES TO THE DEFINITIONS**119.08 With thermally conductive material:**

This subclass is indented under subclass 119.07. Subject matter wherein one of the layers of the spacer is a material which transfers heat.

119.09 With diffusion barrier:

This subclass is indented under subclass 119.07. Subject matter wherein one of the layers of the spacer is a layer for preventing particles of spacer material from migrating out of the spacer area and into other layers of the transducer.

119.1 Three or more layers:

This subclass is indented under subclass 119.07. Subject matter wherein the number of layers is greater than two.

119.11 Configuration detail:

This subclass is indented under subclass 119.05. Subject matter includes a detail of the structural form of the gap spacer.

119.12 Nonuniform width transducing face:

This subclass is indented under subclass 119.11. Subject matter wherein the surface of the gap spacer facing the medium has a varying side-to-side measurement in the transverse direction of a recorded track.

119.13 Nonuniform width vertically:

This subclass is indented under subclass 119.11. Subject matter wherein a cross section of the gap spacer, in the transverse direction of a recorded track, varies along its extent normal to the storage medium.

123.01 Coil:

This subclass is indented under subclass 110. Subject matter including a detail of the position, size, inductance or other feature of the traces used to generate magnetic flux in the head.

- (1) Note. The term "trace" in the art is a singular wire or ribbon or strand of conductive material. Typically, multiple traces make up a coil.

SEE OR SEARCH CLASS:

336, Inductor Devices, subclasses 5 through 234 for inductor windings.

123.02 For perpendicular recording head:

This subclass is indented under subclass 123.01. Subject matter wherein a transducer is configured to record data in a storage medium by orienting magnetic domains normal to the plane of the storage medium.

- (1) Note. Although this definition refers to the plane of the storage medium, it is understood that the medium may have a nonplanar macroscopic shape.

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D. CHANGES TO THE DEFINITIONS**123.03 Location:**

This subclass is indented under subclass 123.02. Subject matter includes a detail of the position of the coil with respect to a specific part of the head structure.

123.04 On return pole:

This subclass is indented under subclass 123.03. Subject matter wherein the coil is positioned on or about a flux returning pole of the head structure.

123.05 On main/recording pole:

This subclass is indented under subclass 123.03. Subject matter wherein the coil is positioned on or about a flux-emanating pole of the head structure.

123.06 Configuration detail:

This subclass is indented under subclass 123.02. Subject matter including a detail of the structural form of the coil.

123.07 Nonuniform trace spacing:

This subclass is indented under subclass 123.06. Subject matter including a detail of the spacing between individual traces of the coil, where that spacing is not constant.

123.08 Trace cross section shape:

This subclass is indented under subclass 123.06. Subject matter including a detail of the cross-sectional configuration of an individual trace.

123.09 Insulation detail:

This subclass is indented under subclass 123.02. Subject matter including a detail of a nonmagnetic, nonelectrically conductive material used to encapsulate and isolate the coil.

123.1 Electrical connection detail:

This subclass is indented under subclass 123.02. Subject matter including a detail of a structure that provides a conductive path between the coil and an external device.

123.11 Plural separate coils:

This subclass is indented under subclass 123.02. Subject matter wherein the coil is made up of at least two distinct groups of turns of traces.

123.12 Shielding/protection:

This subclass is indented under subclass 123.02. Subject matter including a detail of a material or structure which protects or shields the coil, e.g., electrical shielding, corrosion protection.

SEE OR SEARCH CLASS:

320, Electricity: Battery or Capacitor Charging or Discharging, subclasses 100 through 167 for detail of magnetic shielding, head insulation, respectively, accompanied with a magnetoresistive (MR) type read head.

123.13 For thin film longitudinal recording head:

This subclass is indented under subclass 123.01. Subject matter wherein the transducer comprises a plurality of thin layers and is configured to record data in a storage medium by orienting magnetic domains parallel to the plane of the storage medium.

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- (1) Note. Although this definition refers to the plane of the storage medium, it is understood that the medium may have a nonplanar macroscopic shape.

123.14 Pancake type:

This subclass is indented under subclass 123.13. Subject matter wherein the layers are located in planes parallel to the plane of the medium.

123.15 Plural coil layers:

This subclass is indented under subclass 123.14. Subject matter wherein the coil is made up of more than one layer, with each layer positioned in a plane parallel to the plane of the medium.

123.16 Insulation detail:

This subclass is indented under subclass 123.14. Subject matter including a detail of the nonmagnetic, nonelectrically conductive material used to encapsulate and isolate the coil.

123.17 Plural separate coils:

This subclass is indented under subclass 123.13. Subject matter wherein coil is made up of at least two distinct groups of turns of traces.

123.18 Single plane coil:

This subclass is indented under subclass 123.13. Subject matter wherein the coil is made up of plural connected conductive traces located in one plane perpendicular to the plane of the medium.

123.19 Configuration detail:

This subclass is indented under subclass 123.18. Subject matter including a detail of the structural form of the winding.

123.2 Trace cross section shape:

This subclass is indented under subclass 123.19. Subject matter including a detail of the cross-sectional configuration of an individual trace.

123.21 Trace spacing:

This subclass is indented under subclass 123.19. Subject matter including a detail of the spacing between individual traces of the winding.

123.22 Coil spacing from storage medium:

This subclass is indented under subclass 123.19. Subject matter including a detail of the spacing of the trace closest to the medium.

123.23 Coil spacing from plane of gap:

This subclass is indented under subclass 123.19. Subject matter includes a detail of the spacing from the plane of the coil to a plane of the gap, the spacing being measured in the direction of travel of the medium.

- (1) Note. The gap is the transducing gap that allows the flux to pass through during the writing/recording process.

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D. CHANGES TO THE DEFINITIONS**123.24 Seed layer:**

This subclass is indented under subclass 123.18. Subject matter wherein one or more additional layers are provided to promote disposition or growth of coil material.

123.25 Insulation detail:

This subclass is indented under subclass 123.18. Subject matter includes a detail of a nonmagnetic, nonelectrically conductive material used to encapsulate and isolate the coil.

123.26 Zero throat height detail:

This subclass is indented under subclass 123.25. Subject matter wherein the detail of the insulation pertains to the point at which the distance between the poles begins to increase.

123.27 Apex angle:

This subclass is indented under subclass 123.25. Subject matter includes a detail of the configuration of the nonmagnetic, nonelectrically conductive insulation that defines the slope of a pole adjacent a pole tip region.

(1) Note. A pole tip region is the area closest to the storage medium.

123.28 Plural layers:

This subclass is indented under subclass 123.25. Subject matter wherein the nonmagnetic, nonelectrically conductive insulation is made up of more than one layer.

123.29 Diverse materials:

This subclass is indented under subclass 123.28. Subject matter wherein at least one of the plural layers is of a material different from that of the other layers.

123.3 Planarizing layer:

This subclass is indented under subclass 123.28. Subject matter wherein at least one of the plural insulation layers is provided to form a flat surface.

123.31 Below coil:

This subclass is indented under subclass 123.28. Subject matter wherein more than one of the plural insulation layers are positioned below the plane of the coil.

123.32 Above coil:

This subclass is indented under subclass 123.28. Subject matter wherein more than one of the plural insulation layers are positioned above the plane of the coil.

123.33 Between traces:

This subclass is indented under subclass 123.28. Subject matter wherein more than one of the plural insulation layers are positioned between individual conductive traces of the coil.

123.34 Between coil and medium:

This subclass is indented under subclass 123.28. Subject matter wherein more than one of the plural insulation layers are positioned between the medium and the trace closest to the medium.

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D. CHANGES TO THE DEFINITIONS**123.35 Plural diverse layers:**

This subclass is indented under subclass 123.18. Subject matter wherein each trace of the coil is made up of more than one layer, at least one of which is of a material different from that of the other layers.

123.36 Electrical connection detail:

This subclass is indented under subclass 123.18. Subject matter including a specific feature that provides a conductive path between the coil and an external device.

123.37 Shielding/protection:

This subclass is indented under subclass 123.18. Subject matter including a detail of a material or structure that protects or shields the coil, e.g., electrical shielding, corrosive protection.

SEE OR SEARCH CLASS:

320, Electricity: Battery or Capacitor Charging or Discharging, subclasses 100 through 167 for detail of magnetic shielding, head insulation, respectively, accompanied with a magnetoresistive (MR) type read head.

123.38 Plural plane coil:

This subclass is indented under subclass 123.13. Subject matter wherein the coil is made up of plural connected conductive traces located in more than one plane perpendicular to the plane of the storage medium.

123.39 Intercoil layer electrical connection detail:

This subclass is indented under subclass 123.38. Subject matter including a specific feature that provides a conductive path between two or more coil segments.

123.4 Configuration detail:

This subclass is indented under subclass 123.38. Subject matter including a detail of the structural form of a coil layer.

123.41 Trace cross section shape:

This subclass is indented under subclass 123.4. Subject matter including a detail of the cross-sectional configuration of an individual trace.

123.42 Trace spacing:

This subclass is indented under subclass 123.4. Subject matter including a detail of the spacing between individual traces of the coil.

123.43 Coil spacing from storage medium:

This subclass is indented under subclass 123.4. Subject matter including a detail of the spacing of the trace closest to the medium.

123.44 Coil spacing from plane of gap:

This subclass is indented under subclass 123.4. Subject matter including a detail of the spacing from the plane of the coil to the plane of the gap, the spacing being measured in the direction of travel of the medium.

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D. CHANGES TO THE DEFINITIONS**123.45 Seed layer:**

This subclass is indented under subclass 123.38. Subject matter wherein one or more additional layers are provided to promote disposition or growth of coil material.

123.46 insulation detail:

This subclass is indented under subclass 123.38. Subject matter including a detail of a nonmagnetic, nonelectrically conductive material used to encapsulate and isolate the coil.

123.47 Zero throat height detail:

This subclass is indented under subclass 123.46. Subject matter wherein the detail of the insulation pertains to the point at which the distance between the poles begins increase.

123.48 Apex angle:

This subclass is indented under subclass 123.46. Subject matter including a detail of the configuration of the nonmagnetic, nonelectrically conductive insulation that defines the slope of a core adjacent the pole tip region.

123.49 Plural layers:

This subclass is indented under subclass 123.46. Subject matter wherein the nonmagnetic, nonelectrically conductive insulation is made up of more than one layer.

123.5 Diverse materials:

This subclass is indented under subclass 123.49. Subject matter wherein at least one of the plural layers is of a material different from that of other layers.

123.51 Planarizing layer:

This subclass is indented under subclass 123.49. Subject matter wherein at least one of the plural layers is provided to form a flat surface.

123.52 Below coil:

This subclass is indented under subclass 123.49. Subject matter wherein more than one of the layers are positioned below the plane of the lowermost coil segment.

123.53 Above coil:

This subclass is indented under subclass 123.49. Subject matter wherein more than one of the layers are positioned above the plane of the uppermost coil segment.

123.54 Between traces:

This subclass is indented under subclass 123.49. Subject matter wherein more than one of the plural layers are positioned between the adjacent segments of the coil.

123.55 Between coil and medium:

This subclass is indented under subclass 123.49. Subject matter wherein more than one of the plural layers are positioned between the medium and the traces closest the medium.

123.56 Plural diverse layers:

This subclass is indented under subclass 123.38. Subject matter wherein each trace of the coil is made up of more than one layer, at least one of which is of a material different from that of the other layers.

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D. CHANGES TO THE DEFINITIONS**123.57 Electrical connection detail:**

This subclass is indented under subclass 123.38. Subject matter including a specific feature that provides a conductive path between the coil and an external device.

123.58 Shielding/protection:

This subclass is indented under subclass 123.38. Subject matter including a detail of a material or structure that protects or shields one or more of the coil segments, e.g., electrical shielding, corrosion protection.

SEE OR SEARCH CLASS:

320, Electricity: Battery or Capacitor Charging or Discharging, subclasses 100 through 167 for detail of magnetic shielding, head insulation, respectively, accompanied with a magnetoresistive (MR) type read head.

123.59 Location:

This subclass is indented under subclass 123.13. Subject matter including a detail of the position of the winding with respect to a specific part of the head structure.

123.6 Coil around pole adjacent substrate:

This subclass is indented under subclass 123.59. Subject matter wherein the coil is positioned on or about the pole closest to a supporting base layer.

123.61 Coil around pole remote from substrate:

This subclass is indented under subclass 123.59. Subject matter wherein the coil is positioned on or about the pole remote from a supporting base layer.

125.01 Core:

This subclass is indented under subclass 110. Subject matter comprising a position, size, configuration, or other feature of a magnetic flux conducting element of the head.

125.02 Perpendicular recording head:

This subclass is indented under subclass 125.01. Subject matter wherein a transducer is configured to record data in a storage medium by orienting magnetic domains normal to the plane of the storage medium.

125.03 Main/recording pole:

This subclass is indented under subclass 125.02. Subject matter including a detail of the magnetic element from which the recording flux projects into the medium.

125.04 Plural poles:

This subclass is indented under subclass 125.03. Subject matter wherein the recording pole is made up of a plurality of separate poles.

125.05 Offset from track centerline:

This subclass is indented under subclass 125.03. Subject matter wherein the recording pole is asymmetrically located relative to the center of a recorded track in the transverse direction.

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D. CHANGES TO THE DEFINITIONS**125.06 Separate pole tip:**

This subclass is indented under subclass 125.03. Subject matter wherein the recording pole includes an additional tip element immediately adjacent the medium.

125.07 Junction detail:

This subclass is indented under subclass 125.06. Subject matter including a detail of the area where the separate tip element is joined to the recording pole.

125.08 Laminated:

This subclass is indented under subclass 125.06. Subject matter wherein the separate tip element is made up of more than one layer.

125.09 Nonuniform width transducing face:

This subclass is indented under subclass 125.06. Subject matter wherein the surface of the separate tip element facing the medium has a varying side to side measurement in the transverse direction of a recorded track.

125.1 Nonuniform width vertically:

This subclass is indented under subclass 125.06. Subject matter wherein a cross section of the separate tip element, in the transverse direction of a recorded track, varies along its extent normal to the recorded track.

125.11 Nonuniform thickness vertically:

This subclass is indented under subclass 125.06. Subject matter wherein a cross section of the separate tip element, in the traveling direction of the medium, varies along its extent normal to the medium.

125.12 Laminated:

This subclass is indented under subclass 125.03. Subject matter wherein the recording pole is made up of more than one layer.

125.13 Nonuniform width transducing face:

This subclass is indented under subclass 125.03. Subject matter wherein the surface of the recording pole facing the medium has a varying side to side measurement in the transverse direction of a recorded track.

125.14 Nonuniform width vertically:

This subclass is indented under subclass 125.03. Subject matter wherein a cross section of the recording pole, in the transverse direction of a recorded track, varies along its extent normal to the medium.

125.15 Nonuniform thickness vertically:

This subclass is indented under subclass 125.03. Subject matter wherein a cross section of the recording pole, in the traveling direction of the medium, varies along its extent normal to the medium.

125.16 Return pole:

This subclass is indented under subclass 125.02. Subject matter including a detail of the magnetic element to which the recording flux returns from the medium.

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D. CHANGES TO THE DEFINITIONS**125.17 Plural poles:**

This subclass is indented under subclass 125.16. Subject matter wherein the return pole is made up of a plurality of separate poles.

125.18 Offset from track centerline:

This subclass is indented under subclass 125.16. Subject matter wherein the return pole is asymmetrically located relative to the center of a recorded track in the transverse direction.

125.19 Nonuniform width transducing face:

This subclass is indented under subclass 125.16. Subject matter wherein the surface of the return pole facing the medium has a varying side to side measurement in the transverse direction of a recorded track.

125.2 Nonuniform width vertically:

This subclass is indented under subclass 125.16. Subject matter wherein a cross section of the return pole, in the transverse direction of a recorded track, varies along its extent normal to the recorded track.

125.21 Nonuniform thickness vertically:

This subclass is indented under subclass 125.16. Subject matter wherein a cross section of the return pole, in the traveling direction of the medium, varies along its extent normal to the medium.

125.22 Separate pole tip:

This subclass is indented under subclass 125.16. Subject matter wherein the return pole comprises an additional tip element immediately adjacent the medium which is joined to the return pole.

125.23 Junction detail:

This subclass is indented under subclass 125.22. Subject matter including a details of the area where the separate tip element is joined to the return pole.

125.24 Laminated:

This subclass is indented under subclass 125.22. Subject matter wherein the separate tip element is made up of more than one layer.

125.25 Configuration detail:

This subclass is indented under subclass 125.22. Subject matter including a detail of the structural form of the separate tip element.

125.26 Laminated:

This subclass is indented under subclass 125.16. Subject matter wherein the return pole is made up of more than one layer.

125.27 Coupling section:

This subclass is indented under subclass 125.02. Subject matter including a detail of an element remote from the storage medium which connects the recording pole to the return pole.

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D. CHANGES TO THE DEFINITIONS**125.28 Laminated:**

This subclass is indented under subclass 125.27. Subject matter wherein the coupling section is made up of more than one layer.

125.29 Junction detail:

This subclass is indented under subclass 125.27. Subject matter including a detail of the area where the coupling section is joined to either the recording pole or return pole.

125.3 Accessory feature:

This subclass is indented under subclass 125.02. Subject matter including a detail of an element providing a function other than magnetic flux conduction, e.g., abrasion protection, corrosion protection, electrical shielding, magnetic shielding.

125.31 Heat generating structure:

This subclass is indented under subclass 125.3. Subject matter wherein the function involved is the generation of heat.

125.32 Heat transfer structure:

This subclass is indented under subclass 125.3. Subject matter wherein the function involved is the removal of heat.

125.33 Thin film longitudinal recording head:

This subclass is indented under subclass 125.01. Subject matter wherein a transducer comprises a plurality of thin layers and is configured to record data in a storage medium by orienting magnetic domains parallel to the plane of the storage medium.

125.34 Pancake type:

This subclass is indented under subclass 125.33. Subject matter wherein the layers are located in planes parallel to the plane of the medium.

125.35 Core section adjacent medium:

This subclass is indented under subclass 125.34. Subject matter including a detail of an element forming the front core section located immediately adjacent and parallel to the plane of the medium.

125.36 Back core section remote from medium:

This subclass is indented under subclass 125.34. Subject matter including a detail of an element forming the rear core section remote from and parallel to the plane of the medium.

125.37 Coupling section:

This subclass is indented under subclass 125.34. Subject matter including a detail of an element remote from the storage medium which connects the parallel front and rear core sections.

125.38 Substrate:

This subclass is indented under subclass 125.33. Subject matter including a detail of a nonmagnetic support for the head.

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D. CHANGES TO THE DEFINITIONS**125.39 Laminated:**

This subclass is indented under subclass 125.38. Subject matter wherein the substrate is made up of more than one layer.

125.4 Nonuniform thickness vertically:

This subclass is indented under subclass 125.38. Subject matter wherein a cross section of the substrate, in the traveling direction of the medium, varies along its extent normal to the medium.

125.41 Pole adjacent substrate:

This subclass is indented under subclass 125.33. Subject matter including a detail of the magnetic core section immediately adjacent a supporting base layer.

125.42 Zero throat height detail:

This subclass is indented under subclass 125.41. Subject matter wherein the detail of the insulation pertains to the point at which the distance between the poles begins increase.

125.43 Separate pole tip:

This subclass is indented under subclass 125.41. Subject matter wherein the pole adjacent the substrate includes an additional tip element immediately adjacent the medium.

125.44 Junction detail:

This subclass is indented under subclass 125.43. Subject matter including a detail of the area where the separate tip element is joined to the pole adjacent the substrate.

125.45 Laminated:

This subclass is indented under subclass 125.43. Subject matter wherein the separate tip element is made up of more than one layer.

125.46 Nonuniform width transducing face:

This subclass is indented under subclass 125.43. Subject matter wherein the surface facing the medium of the separate tip element has a varying side to side measurement in the transverse direction of a recorded track.

125.47 Nonuniform width vertically:

This subclass is indented under subclass 125.43. Subject matter wherein a cross section of the separate tip element, in the transverse direction of a recorded track, varies along its extent normal to the recorded track.

125.48 Nonuniform thickness vertically:

This subclass is indented under subclass 125.43. Subject matter wherein a cross section of the separate tip element, in the traveling direction of the medium, varies along its extent normal to the medium.

125.49 Projecting:

This subclass is indented under subclass 125.43. Subject matter where the medium-facing surface of the separate tip element is closer to the medium than the medium-facing surface of the pole it is attached to.

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D. CHANGES TO THE DEFINITIONS**125.5 Laminated:**

This subclass is indented under subclass 125.41. Subject matter wherein the pole adjacent the substrate is made up of more than one layer.

125.51 Nonuniform width transducing face:

This subclass is indented under subclass 125.41. Subject matter wherein the surface facing the medium of the pole adjacent the substrate has a varying side to side measurement in the transverse direction of a recorded track.

125.52 Nonuniform width vertically:

This subclass is indented under subclass 125.41. Subject matter wherein a cross section of the pole adjacent the substrate, in the transverse direction of a recorded track, varies along its extent normal to the recorded track.

125.53 Nonuniform thickness vertically:

This subclass is indented under subclass 125.41. Subject matter wherein a cross section of the pole adjacent the substrate, in the traveling direction of the medium, varies along its extent normal to the medium.

125.54 Pole remote from substrate:

This subclass is indented under subclass 125.33. Subject matter including a detail of the magnetic core section remote from a supporting base layer.

125.55 Zero throat height detail:

This subclass is indented under subclass 125.54. Subject matter wherein the detail of the insulation pertains to the point at which the distance between the poles begins increase.

125.56 Separate pole tip:

This subclass is indented under subclass 125.54. Subject matter wherein the pole remote from the substrate includes an additional tip element immediately adjacent the medium.

125.57 Junction detail:

This subclass is indented under subclass 125.56. Subject matter including a detail of the area where the separate tip element is joined to the pole remote from the substrate.

125.58 Laminated:

This subclass is indented under subclass 125.56. Subject matter wherein the separate tip element is made up of more than one layer.

125.59 Nonuniform width transducing face:

This subclass is indented under subclass 125.56. Subject matter wherein the surface facing the medium of the separate tip element has a varying side to side measurement in the transverse direction of a recorded track.

125.6 Nonuniform width vertically:

This subclass is indented under subclass 125.56. Subject matter wherein a cross section of the separate tip element, in the transverse direction of a recorded track, varies along its extent normal to the recorded track.

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D. CHANGES TO THE DEFINITIONS

- 125.61 Nonuniform thickness vertically:**
This subclass is indented under subclass 125.56. Subject matter wherein a cross section of the separate tip element, in the traveling direction of the medium, varies along its extent normal to the medium.
- 125.62 Projecting:**
This subclass is indented under subclass 125.56. Subject matter where the medium-facing surface of the separate tip element is closer to the medium than the medium-facing surface of the pole it is attached to.
- 125.63 Laminated:**
This subclass is indented under subclass 125.54. Subject matter wherein the pole remote from the substrate is made up of more than one layer.
- 125.64 Nonuniform width transducing face:**
This subclass is indented under subclass 125.54. Subject matter wherein the surface facing the medium of the pole remote from the substrate has a varying side to side measurement in the transverse direction of a recorded track.
- 125.65 Nonuniform width vertically:**
This subclass is indented under subclass 125.54. Subject matter wherein a cross section of the pole remote from the substrate, in the transverse direction of a recorded track, varies along its extent normal to the recorded track.
- 125.66 Nonuniform thickness vertically:**
This subclass is indented under subclass 125.54. Subject matter wherein a cross section of the pole remote from the substrate, in the traveling direction of the medium, varies along its extent normal to the medium.
- 125.67 Coupling section:**
This subclass is indented under subclass 125.33. Subject matter including a detail of an element remote from the medium which connects the pole adjacent the substrate to the pole remote from the substrate.
- 125.68 Junction detail:**
This subclass is indented under subclass 125.67. Subject matter including a detail of the area where the coupling section is joined to either the pole adjacent the substrate or the pole remote from the substrate.
- 125.69 Laminated:**
This subclass is indented under subclass 125.67. Subject matter wherein the coupling section is made up of more than one layer.
- 125.7 Nonuniform cross section:**
This subclass is indented under subclass 125.67. Subject matter wherein the coupling section has a nonconstant cross-sectional configuration.
- 125.71 Accessory feature:**
This subclass is indented under subclass 125.33. Subject matter including a detail of an element providing a function other than magnetic flux conduction.

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D. CHANGES TO THE DEFINITIONS**125.72 Protective structure:**

This subclass is indented under subclass 125.71. Subject matter wherein the function is protection, e.g., abrasion protection, corrosion protection, electrical shielding, magnetic shielding.

125.73 Laminated:

This subclass is indented under subclass 125.72. Subject matter wherein the protective structure is made up of more than one layer.

125.74 Heat generating structure:

This subclass is indented under subclass 125.71. Subject matter wherein the function involved is the generation of heat.

125.75 Heat transfer structure:

This subclass is indented under subclass 125.71. Subject matter wherein the function involved is the removal of heat.