

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

CLASSIFICATION ORDER 1916

FEBRUARY 7, 2012

PROJECT E-7095

The following classification changes will be effected by this order:

	<u>Class</u>	<u>Subclass</u>	<u>Art Unit</u>	<u>Ex'r Search Room</u>
Abolished:	360	97.01-97.04	2627	RND0000B15
Established:	360	97.11-97.19, 97.2, 97.21, 97.22, 99.13-99.19, 99.2, 99.21-99.25	2627	RND0000B15

The following class is also impacted by this order:

361

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 1916

FEBRUARY 7, 2012

PROJECT E-7095

Project Leader(s): Tuan D. Nguyen

Examiner(s): Wayne Young

Editor(s): Elma La Touche

Publications Specialist(s): Yvonne Smith

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

73.02	...Control of relative speed between carriers	77.17	.....Dithering
73.03	...Rotary carrier	78.01	..Track changing
73.04	...Linear carrier	78.02	...Tape
73.05	....Plural speed transport	78.03	....Plural tapes
73.06	.....Automatic change between fixed speeds	78.04	...For rotary carrier (e.g., disc)
73.07	.....Automatic selection of carrier or track speed	78.05	....Coarse and fine head drive motors
73.08	.....Variable speed	78.06	....Specified velocity pattern during access
73.09	....Constant speed	78.07	....Controlled by memory device
73.11	....By reproduced control signal and transport derived signal	78.08	....Specified spatial pattern during access
73.12	....By reproduced control signal	78.09	....Including model of servo system or element
73.13	.....From separate track	78.11	....Including nonmagnetic position sensing
73.14	....By signal derived from transport	78.12	....Including particular head actuator
74.1	..Stopping or reversing	78.13	.....Stepping motor
74.2	...Responsive to reel rotation	78.14	....By recorded servo reference or address signal
74.3	...Responsive to tape tension	78.15	....Drum
74.4	...Responsive to magnetic recorded signals	79	RECORDER CONTROL OF AN EXTERNAL DEVICE
74.5	...Responsive to physical property of record	80	.Slide or movie projectors
74.6	....Photoelectric	81	RECORD TRANSPORT WITH HEAD MOVING DURING TRANSDUCING
74.7	....Conductive	82	.Belt record
75	.Controlling the head	83	.Tape record
76	..Azimuth or skew	84	..Rotating head
77.01	..Track centering	85	...Tape in container
77.02	...Rotary carrier	86	.Disk record
77.03	....By nonmagnetic sensing (e.g., optical, capacitive)	87	.Drum record
77.04	....By memory storage of repeatable error or correction	88	RECORD TRANSPORT WITH HEAD STATIONARY DURING TRANSDUCING
77.05	....By servo signal component from carrier surface separate from information signal bearing surface	89	.Wire record
77.06	....Reproduced data signal used for tracking	90	.Tape record
77.07	....By tracking signal recorded on or immediately beneath surface	91	..Plural tapes
77.08	.....Distinct servo sector	92.1	...Tape in container
77.11	.....Continuous servo signal	93	..Tape in container
77.12	...Elongated web carrier (i.e., tape)	94	...Transport accommodates different types
77.13	....Transverse scan path	95	...With tape extraction
77.14	.....By pilot signal	96.1	...Plural reels
77.15	.....Plural pilot signals along single transverse path	96.2	....With dual capstan drive
77.16	.....Having head deflection drive (e.g., piezoelectric bimorph)	96.3	....Reel drive details
		96.4	.....With common capstan drive
		96.51	....Container mounting details
		96.61	.....With pivotal holder
		97.11	.Disk record
		97.12	..Environmental control
		97.13	...Airflow

97.14	....Having shroud	234.1	..Liquid bearing
97.15	....Having fins	234.2	..Flexible disk
97.16	....With filter	234.3	..Air bearing slider detail
97.17	.....Recirculating filter	234.4	...IC/circuit component on slider
97.18	.....External air filter	234.5	...Electrical attachment of slider/head
97.19	...Vibration or resonance suppression	234.6	...Mechanical attachment of slider to its support
97.2	....Snubber	234.7	...Head attachment to slider
97.21	...EMI shielding	234.8	....On/in side of slider
97.22	...Fluid contaminant	234.9	....In slot of rail
98.01	..Plural disks	235	....Signal winding mount/access detail
98.02	...Axially fixed flexible disks	235.1	...Slider material
98.03	....With pneumatic partitioning of disks	235.2	....Rail material
98.04	...Changer	235.3	....Body material
98.05	....Control detail	235.4	...Air bearing surface detail
98.06	....Mechanical detail	235.5	....Negative pressure type
98.07	...Rotational drive detail	235.6	....Leading end detail
98.08	...Seating of disks	235.7	....Trailing end detail
99.01	..Flexible disk	235.8	....Rail surface detail
99.02	...Loading or ejecting mechanism	235.9	....Rail side edge detail
99.03	....Motorized	236	....Cross rail detail
99.04	...Rotational drive detail	236.1	....Varying width rail
99.05	...Disk seating	236.2	....Asymmetrical rail arrangement
99.06	...Loading or ejecting mechanism	236.3	....Three or more rails/pads
99.07	...Motorized	236.4	...Leading end detail
99.08	..Rotational drive detail	236.5	...Trailing end detail
99.09	..Movable drive	236.6	...Rail surface detail
99.11	...Stationary drive	236.7	...Rail side edge detail
99.12	..Disk seating	236.8	...Varying width rail
99.13	..Removable drive cartridge	236.9	...Asymmetrical rail arrangement
99.14	..Removable hard disk cartridge	237	...Three or more rails/pads
99.15	..Housing details	237.1	...Partial contact
99.16	...Base plate	240	HEAD MOUNTING
99.17	....Laminated	250	..For moving head into/out of transducing position
99.18	...Cover	251	..Tape record having arcuate head retraction movement
99.19	....Laminated	251.1	..Tape record having linear head retraction movement
99.2	...Having fastening details of housing parts	251.2	...Driven by tape driver
99.21	....Sealing	251.3	...Cam type
99.22	.....Gasket	251.4	...Solenoid type
99.23	...Circuit board	251.5	...Rotary head type
99.24	....Attachment detail	254	..Disk record
99.25	....Electrical interconnector	254.1	...Flexible disk
100.1	..Drum record	254.2	...Arcuate track change type
101	HEAD TRANSPORT WITH RECORD STATIONARY DURING TRANSDUCING	254.3	....Moving lifter
220	FLUID BEARING RECORD SUPPORT	254.4	....Lifter surface detail
221	..Tape record	254.5	....Adjustment detail
221.1	..Liquid bearing	254.6	....Actuator side detail
224	..Disk record	254.7	....Fixed lifter
230	FLUID BEARING HEAD SUPPORT		
231	..Tape record		
234	..Disk record		

254.8	.....Lifter surface detail	266.5	.....Carriage detail
254.9	.....Adjustment detail	266.6	.....Guide detail
255	.....Actuator side detail	266.7	.....Core detail
255.1	...Linear track change type	266.8	.....Magnet detail
255.2	...Moving lifter	266.9	.....Winding detail
255.3	.....Lifter surface detail	267	....Band
255.4	.....Adjustment detail	267.1	....Cam
255.5	.....Actuator side detail	267.2	....Rack
255.6	...Fixed lifter	267.3	....Screw
255.7	.....Lifter surface detail	267.4	.....Screw/follower detail
255.8	.....Adjustment detail	267.5	.....Carriage detail
255.9	.....Actuator side detail	267.6	.....Guide detail
256	...Latch	267.7	.....Screw mount detail
256.1	....Air vane	267.8	.....Adjustable
256.2	....Magnetic	267.9	...Including shifting head to different disks
256.3	....Electrically driven	270	.For moving head during transducing
256.4	....Inertial	271	..Tape record having rotary head
256.5	....Plural latches	271.1	...Rotating drum
256.6	....Adjustment detail	271.2	....Axle bearing
260	.For shifting head between tracks	271.3	.....Hydrodynamic
261	..Tape record having rotary head movement	271.4	....Axle seal
261.1	..Tape record having linear head movement	271.5	....Head mount to drum
261.2	...Cam	271.6	....Drum mounting
261.3	...Screw	271.7	....Drum motor
264	..Disk record	271.8	...Stationary drum
264.1	...Arcuate head movement	271.9	....Electrical connection detail
264.2	....Electrical connection detail onto actuator arm	272	...Power supply
264.3	....Driver detail	281	...Signal transfer to/from head
264.4	.....Independent head movement	281.1	....Transformer mounting detail
264.5	.....Plural drivers for each head	281.2	....Transformer axis parallel to axis of head rotation
264.6	.....Band	281.3	....Transformer axis perpendicular to axis of head rotation
264.7	.....Voice coil	281.4	....Coil/winding detail
264.8	.....Core detail	281.5	....Core detail
264.9	.....Magnet detail	281.6	....Electrical or magnetic shielding
265	.....Winding detail	281.7	....Electrical connection between head and rotary part of transformer
265.1	....Limiter/stop	281.8	....Plural transformers
265.2	....Bearing	281.9	....Photoelectric
265.3	.....Seal	282	....Contact type transformer
265.4	.....Radial	274	..Disk record
265.5	.....Thrust	290	.For adjusting head position
265.6	.....Mounting detail	291	..Tape record
265.7	....E block detail	291.1	...Cam adjuster
265.8	.....Detail of coil support	291.2	...Screw adjuster
265.9	.....Detail of actuator arm supporting head suspension	291.3	....Plural screws
266	.....Arm shape	291.4	...Rotary head
266.1	.....Arm mounting	291.5	....Adjustment of drum axis
266.2	...Linear head movement		
266.3	....Electrical connection detail onto actuator arm		
266.4	....Voice coil		

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

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

- 123.59 ...Location
- 123.6Coil around pole adjacent substrate
- 123.61Coil around pole remote from substrate
- 125.01 .Core
- 125.02 ..Perpendicular recording head
- 125.03 ...Main/recording pole
- 125.04Plural poles
- 125.05Offset from track centerline
- 125.06Separate pole tip
- 125.07Junction detail
- 125.08Laminated
- 125.09Nonuniform width transducing face
- 125.1Nonuniform width vertically
- 125.11Nonuniform thickness vertically
- 125.12Laminated
- 125.13 ...Nonuniform width transducing face
- 125.14 ...Nonuniform width vertically
- 125.15 ...Nonuniform thickness vertically
- 125.16 ...Return pole
- 125.17Plural poles
- 125.18Offset from track centerline
- 125.19 ...Nonuniform width transducing face
- 125.2 ...Nonuniform width vertically
- 125.21 ...Nonuniform thickness vertically
- 125.22Separate pole tip
- 125.23Junction detail
- 125.24Laminated
- 125.25Configuration detail
- 125.26 ...Laminated
- 125.27 ...Coupling section
- 125.28 ...Laminated
- 125.29Junction detail
- 125.3 ...Accessory feature
- 125.31Heat generating structure
- 125.32Heat transfer structure
- 125.33 ..Thin film longitudinal recording head
- 125.34 ...Pancake type
- 125.35Core section adjacent medium
- 125.36Back core section remote from medium
- 125.37Coupling section
- 125.38 ...Substrate
- 125.39 ...Laminated
- 125.4 ...Nonuniform thickness vertically
- 125.41 ...Pole adjacent substrate
- 125.42Zero throat height detail
- 125.43Separate pole tip
- 125.44Junction detail
- 125.45Laminated
- 125.46Nonuniform width transducing face
- 125.47Nonuniform width vertically
- 125.48Nonuniform thickness vertically
- 125.49Projecting
- 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 throath height detail
- 125.56 ...Separate pole tip
- 125.57Junction detail
- 125.58Laminated
- 125.59Nonuniform width transducing face
- 125.6Nonuniform width vertically
- 125.61Nonuniform thickness vertically
- 125.62Projecting
- 125.63 ...Laminated
- 125.64 ...Nonuniform width transducing face
- 125.65 ...Nonuniform width vertically
- 125.66 ...Nonuniform thicknes vertically
- 125.67 ...Coupling section
- 125.68 ...Junction detail
- 125.69 ...Laminated
- 125.7 ...Nonuniform cross section
- 125.71 ...Accessory feature
- 125.72 ...Protective structure
- 125.73Laminated
- 125.74 ...Heat generating structure
- 125.75 ...Heat transfer structure
- 128 .Head accessory
- 129 ..Housing
- 130.1 ..Record separator
- 130.2 ..Record guide
- 130.21 ...Tape record
- 130.22Rotating head
- 130.23Helical scan
- 130.24Head drum details
- 130.3 ..Pressure element
- 130.31 ...Tape record
- 130.32Element mounting details

130.33 ...Element in tape container
 130.34 ...Disc record
 131 **RECORD MEDIUM**
 132 .In container
 133 ..For disk
 134 .Tape
 135 .Disk
 136 .Drum
 137 **MISCELLANEOUS**

CROSS-REFERENCE ART COLLECTIONS

900 **DISK DRIVE PACKAGING**
 901 .Access time
 902 .Storage density (e.g., bpi, tpi)
 903 .Physical parameter (e.g., form factor)
 904 ..Weight

FOREIGN ART COLLECTIONS

FOR 000 **CLASS-RELATED FOREIGN DOCUMENTS**

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

FOR 202 **FLUID BEARING HEAD (360/102)**
 FOR 203 .Flying head (360/103)
 FOR 204 **HEAD MOUNTING (360/104)**
 FOR 205 .For moving head into and out of transducing position (360/105)
 FOR 206 .For shifting head between tracks (360/106)
 FOR 207 .For moving head during transducing (360/107)
 FOR 208 ..Signal transfer to and from head (360/108)
 FOR 209 .For adjusting head position (360/109)
 FOR 213 **MAGNETORESISTIVE OR MAGNETOSTRICTIVE HEAD (360/113)**

HEAD (360/110)
 FOR 214 .Magneto optic (360/114)
RECORD TRANSPORT WITH HEAD STATIONARY DURING TRANSDUCING (360/88)
 .Tape record (360/90)
 ..Plural tapes (360/91)
 FOR 215 ...Tape in container (360/92)
 ..Tape in container (360/93)
 ...Plural reels (360/96.1)
 FOR 216Tape in container (360/96.5)
 FOR 217With pivotal holder (360/96.6)

HEAD (360/110)
 FOR 218 .Gap structure details (360/119)
 FOR 219 ..Spacer material (360/120)
 FOR 220 .Head winding (360/123)
 FOR 221 ..For cross-talk prevention (360/124)
 FOR 222 .Head core (360/125)
 FOR 223 ..Laminated (360/126)
 FOR 224 ..Nonmetallic (360/127)

RECORD TRANSPORT WITH HEAD STATIONARY DURING TRANSDUCING (360/88)
 FOR 225 .Disk record (360/97.01)
 FOR 226 ..Environmental control (e.g., air filter, temperature control) (360/97.02)
 FOR 227 ...Plural disks (360/97.03)
 FOR 228 ...Flexible disk (360/97.04)

FEBRUARY 7, 2012

PROJECT E-7095

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>
360/135	2	360/97.01	412
360/244.8	1	360/97.01	412
360/324.12	1	360/97.02	541
360/97.11	1	360/97.04	7
	2	360/97.03	122
	5	360/97.02	541
	71	360/97.01	412
360/97.12	1	360/97.04	7
	2	360/97.02	541
	3	360/97.03	122
	6	360/97.01	412
	41	360/97.02	541
360/97.13	1	360/97.01	412
	4	360/97.02	541
	12	360/97.01	412
	17	360/97.03	122
	33	360/97.02	541
360/97.14	2	360/97.01	412
	3	360/97.02	541
	7	360/97.03	122
	42	360/97.02	541
360/97.15	3	360/97.03	122
	17	360/97.02	541
360/97.16	1	360/97.04	7
	2	360/97.02	541
	5	360/97.01	412
	24	360/97.03	122
	50	360/97.02	541
360/97.17	1	360/97.01	412
	1	360/97.02	541
	8	360/97.03	122
	16	360/97.02	541
360/97.18	1	360/97.01	412
	12	360/97.03	122
	35	360/97.02	541
360/97.19	1	360/97.01	412
	1	360/97.02	541
	5	360/97.03	122
	22	360/97.01	412
	48	360/97.02	541
360/97.2	1	360/97.03	122
	8	360/97.01	412

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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>
	8	360/97.02	541
360/97.21	1	360/97.02	541
	10	360/97.01	412
	18	360/97.02	541
360/97.22	1	360/97.01	412
	2	360/97.02	541
	19	360/97.02	541
360/98.01	1	360/97.03	122
360/99.01	1	360/97.04	7
360/99.13	1	360/97.03	122
	1	360/97.04	7
	9	360/97.02	541
	17	360/97.01	412
360/99.14	1	360/97.01	412
	1	360/97.03	122
	3	360/97.02	541
	4	360/97.01	412
360/99.15	1	360/97.04	7
	5	360/97.03	122
	23	360/97.02	541
	29	360/97.01	412
360/99.16	1	360/97.02	541
	6	360/97.03	122
	24	360/97.02	541
	58	360/97.01	412
360/99.17	1	360/97.03	122
	5	360/97.02	541
	7	360/97.01	412
360/99.18	1	360/97.01	412
	1	360/97.04	7
	17	360/97.03	122
	65	360/97.02	541
	69	360/97.01	412
360/99.19	2	360/97.03	122
	17	360/97.02	541
	26	360/97.01	412
360/99.2	2	360/97.02	541
	10	360/97.01	412
360/99.21	1	360/97.03	122
	2	360/97.02	541
	18	360/97.02	541
360/99.22	2	360/97.01	412

FEBRUARY 7, 2012

PROJECT E-7095

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>
	2	360/97.02	541
	15	360/97.02	541
360/99.23	1	360/97.01	412
	3	360/97.03	122
	4	360/97.02	541
	20	360/97.01	412
360/99.24	1	360/97.02	541
	10	360/97.01	412
360/99.25	1	360/97.02	541
	2	360/97.03	122
	13	360/97.01	412

FEBRUARY 7, 2012

PROJECT E-7095

DISPOSITION CLASSIFICATION(S) OF PATENTS
FROM ABOLISHED SUBCLASSES REPORT

Generated by Data Control Division

<u>Source Classification</u>	<u>Number of ORs</u>	<u>New Classification</u>	<u>Number of ORs</u>
360/97.02	541	360/97.16	2
		360/97.19	1
360/97.01	412	360/135	2
360/97.03	122	360/98.01	1
360/97.01	412	360/97.13	12
360/97.02	541	360/99.22	15
360/97.04	7	360/99.13	1
		360/97.12	1
360/97.03	122	360/97.13	17
		360/97.17	8
360/97.02	541	360/97.14	3
		360/97.21	1
360/97.01	412	360/99.23	1
		360/97.21	10
360/97.03	122	360/99.17	1
360/97.02	541	360/97.21	18
		360/99.17	5
360/97.03	122	360/99.14	1
360/97.01	412	360/99.18	69
		360/99.24	10
360/97.03	122	360/99.18	17
360/97.02	541	360/97.22	2

FEBRUARY 7, 2012

PROJECT E-7095

DISPOSITION CLASSIFICATION(S) OF PATENTS
FROM ABOLISHED SUBCLASSES REPORT

Generated by Data Control Division

<u>Source Classification</u>	<u>Number of ORs</u>	<u>New Classification</u>	<u>Number of ORs</u>
360/97.03	122	360/97.16	24
360/97.01	412	360/97.22	1
360/97.03	122	360/99.16	6
360/97.02	541	360/97.18	35
		360/97.11	5
360/97.01	412	360/97.16	5
360/97.03	122	360/97.19	5
360/97.01	412	360/99.22	2
360/97.02	541	360/99.14	3
		360/99.24	1
		360/99.21	2
360/97.01	412	360/99.14	1
360/97.02	541	360/97.22	19
360/97.03	122	360/97.15	3
		360/99.19	2
360/97.04	7	360/97.16	1
360/97.01	412	360/99.16	58
		360/99.23	20
360/97.02	541	360/97.14	42
360/97.03	122	360/97.18	12
360/97.02	541	360/99.16	24

FEBRUARY 7, 2012

PROJECT E-7095

DISPOSITION CLASSIFICATION(S) OF PATENTS
FROM ABOLISHED SUBCLASSES REPORT

Generated by Data Control Division

<u>Source Classification</u>	<u>Number of ORs</u>	<u>New Classification</u>	<u>Number of ORs</u>
360/97.01	412	360/97.11	71
360/97.04	7	360/97.11	1
360/97.03	122	360/97.12	3
360/97.02	541	360/99.23	4
360/97.01	412	360/97.2	8
360/97.02	541	360/97.2	8
360/97.03	122	360/97.2	1
		360/99.23	3
360/97.01	412	360/99.17	7
360/97.02	541	360/97.13	33
		360/99.13	9
360/97.04	7	360/99.15	1
360/97.02	541	360/99.21	18
360/97.01	412	360/99.14	4
		360/99.2	10
360/97.02	541	360/99.22	2
360/97.01	412	360/99.18	1
360/97.03	122	360/99.21	1
360/97.02	541	360/99.2	2
		360/97.19	48
360/97.01	412	360/99.15	29
		360/97.19	22
360/97.03	122	360/97.11	2

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PROJECT E-7095

DISPOSITION CLASSIFICATION(S) OF PATENTS
FROM ABOLISHED SUBCLASSES REPORT

Generated by Data Control Division

<u>Source Classification</u>	<u>Number of ORs</u>	<u>New Classification</u>	<u>Number of ORs</u>
360/97.02	541	360/97.13	4
		360/324.12	1
360/97.01	412	360/244.8	1
360/97.03	122	360/97.14	7
360/97.02	541	360/97.17	16
360/97.03	122	360/99.15	5
360/97.01	412	360/99.25	13
		360/97.17	1
360/97.02	541	360/99.19	17
360/97.01	412	360/97.14	2
360/97.02	541	360/97.15	17
360/97.01	412	360/97.18	1
360/97.02	541	360/99.15	23
360/97.04	7	360/99.18	1
360/97.02	541	360/97.17	1
360/97.01	412	360/97.19	1
360/97.04	7	360/99.01	1
360/97.03	122	360/99.13	1
360/97.02	541	360/99.18	65
360/97.01	412	360/99.13	17

FEBRUARY 7, 2012

PROJECT E-7095

DISPOSITION CLASSIFICATION(S) OF PATENTS
FROM ABOLISHED SUBCLASSES REPORT

Generated by Data Control Division

<u>Source Classification</u>	<u>Number of ORs</u>	<u>New Classification</u>	<u>Number of ORs</u>
360/97.02	541	360/97.12	41
		360/99.25	1
360/97.01	412	360/97.12	6
360/97.02	541	360/97.16	50
360/97.01	412	360/99.19	26
360/97.03	122	360/99.25	2
360/97.02	541	360/99.16	1
360/97.01	412	360/97.13	1
360/97.02	541	360/97.12	2

FEBRUARY 07, 2012

PROJECT E-7095

C. CHANGES TO THE USPC-TO-IPC CONCORDANCE

<u>Class</u>	<u>USPC</u> <u>Subclass</u>	<u>Subclass</u>	<u>IPC</u> <u>Notation</u>
360	97.11	G11B	5/012, 17/00
	97.12-97.22	G11B	33/08, 33/14
	99.13-99.25	H05K	7/20
		G11B	17/03 33/02 33/04 33/06 33/08
		H05K	5/02, 5/03, 5/06

CLASS 360 – DYNAMIC MAGNETIC INFORMATION STORAGE OR RETRIEVAL

Definitions Abolished:

Subclasses: 97.01-97.04

Definitions Modified:

Subclass 98.01: In the subclass definition

Delete:

This subclass is indented under subclass 97.01. Subject matter including structure for concurrent accommodation of multiple disks.

Insert:

This subclass is indented under subclass 97.11. Subject matter including structure for concurrent accommodation of multiple disks.

Subclass 99.01: In the subclass definition

Delete:

This subclass is indented under subclass 97.01. Subject matter wherein the disk record carrier is bendable or pliable without permanent change.

Insert:

This subclass is indented under subclass 97.11. Subject matter wherein the disk record carrier is bendable or pliable without permanent change.

Subclass 99.06: In the subclass definition

Delete:

This subclass is indented under subclass 97.01. Subject matter for moving the disk to or from the drive location where recording or reproduction is performed.

Insert:

This subclass is indented under subclass 97.11. Subject matter for moving the disk to or from the drive location where recording or reproduction is performed.

Subclass 99.08: In the subclass definition

Delete:

This subclass is indented under subclass 97.01. Subject matter including a structural detail of the disk rotating device in the drive.

Insert:

This subclass is indented under subclass 97.11. Subject matter including a structural detail of the disk rotating device in the drive.

Subclass 99.12: In the subclass definition

Delete:

This subclass is indented under subclass 97.01. Subject matter including a feature for retaining the disk in or on a disk rotating device.

Insert:

This subclass is indented under subclass 97.11. Subject matter including a feature for retaining the disk in or on a disk rotating device.

Definitions Established:

97.11 Disk record:

This subclass is indented under subclass 88. Subject matter in which the record carrier is a flat circular element.

- (1) Note. The mechanism for imparting motion for recording and reproduction is generally in a drive assembly and rotates the disk about the axis of symmetry of the disk.

SEE OR SEARCH CLASS:

- 341, Coded Data Generation or Conversion, subclass 15 for a digital pattern reading code converter or generator with a movable magnetically coded disk.

97.12 Environmental control:

This subclass is indented under subclass 97.11. Subject matter wherein an ambient condition in the enclosure is controlled.

97.13 Airflow:

This subclass is indented under subclass 97.12. Subject matter wherein the ambient condition is controlled by an air flow.

97.14 Having shroud:

This subclass is indented under 97.13. Subject matter wherein the ambient conditions are controlled by a wall or similar structure surrounding the peripheral wall of the enclosure.

97.15 Having fins:

This subclass is indented under subclass 97.13. Subject matter wherein the ambient conditions are controlled by blades positioned within the enclosure; e.g., air stripper.

97.16 With filter:

This subclass is indented under subclass 97.13. Subject matter including means to clean or purify the air flow.

97.17 Recirculating filter:

This subclass is indented under subclass 94.16. Subject matter including means to clean or purify air by moving the air flow within the enclosure.

97.18 External air filter:

This subclass is indented under subclass 97.16. Subject matter wherein the filter cleans air coming from outside the enclosure.

97.19 Vibration or resonance suppression:

This subclass is indented under subclass 97.12. Subject matter comprising means for reducing undesired mechanical energy from translating to components within the enclosure.

97.2 Snubber:

This subclass is indented under subclass 97.12. Subject matter comprising details of structure that prevents the peripheral edges of the disk to come into contact with a base plate or head/arm assembly during impact or external forces.

97.21 EMI shielding:

This subclass is indented under subclass 97.12. Subject matter comprising means for reducing undesired electromagnetic interference from reaching the magnetic disk or head structure.

97.22 Fluid contaminant:

This subclass is indented under 97.12. Subject matter wherein an enclosure detail reduces undesired effects of a particular liquid or gas; e.g., helium.

99.13 Removable drive cartridge:

This subclass is indented under subclass 97.11. Subject matter in which an assembly of at least a disk record and a drive motor are encased in a self-contained enclosure unit that can be removed from an external structure; e.g., a computer housing.

99.14 Removable hard disk cartridge:

This subclass is indented under subclass 97.11. Subject matter in which a drive accepts a housed flat circular element that is not bendable or pliable.

99.15 Housing details:

This subclass is indented under subclass 97.11. Subject matter comprising details of an enclosure of the moving mechanism or head.

99.16 Base plate:

This subclass is indented under subclass 99.15. Subject matter comprising details of a bottom structure of the enclosure.

99.17 Laminated:

This subclass is indented under subclass 99.16. Subject matter wherein the bottom structure comprises two or more layers of material in contact.

99.18 Cover:

This subclass is indented under subclass 99.15. Subject matter comprising details of a top structure of the enclosure.

99.19 Laminated:

This subclass is indented under subclass 99.18. Subject matter wherein the top structure comprises two or more layers of material in contact.

99.2 Having fastening details of housing parts:

This subclass is indented under subclass 99.15. Subject matter comprising a structure for connecting elements of the enclosure.

99.21 Sealing:

This subclass is indented under subclass 99.2. Subject matter comprising means for reducing undesired external contaminants from entering the enclosure.

99.22 Gasket:

This subclass is indented under 99.21. Subject matter wherein the means for reducing undesired external contaminants from entering the enclosure is a mechanical seal that fills the space between two mating surfaces.

99.23 Circuit board:

This subclass is indented under 99.15. Subject matter including details of a means for mechanically supporting and electrically connecting electronic components using conductive pathways etched from copper sheets laminated onto a non-conductive substrate in the enclosure.

99.24 Attachment detail:

This subclass is indented under subclass 99.23. Subject matter comprising fastening means or other structure to facilitate attachment of the means for mechanically supporting and electrically connecting electronic components in the enclosure.

99.25 Electrical interconnector:

This subclass is indented under subclass 99.23. Subject matter comprising details of a device to electrically connect the means for mechanically supporting and electrically connecting electronic components to other electrical components in the enclosure.

FOREIGN ART COLLECTIONS**FOR 225 Disk record (360/97.01):**

This foreign art collection is indented under unnumbered placeholder 360/88. Foreign art collection in which the record carrier is a flat circular element.

- (1) Note. The mechanism for imparting motion for recording and reproduction is generally in a drive assembly and rotates the disk about its axis of symmetry.

FOR 226 Environmental control (e.g., air filter, temperature control) (360/97.02):

This foreign art collection is indented under FOR 225. Foreign art collection wherein an ambient condition of the disk drive is controlled.

FOR 227 Plural disks (360/97.03):

This foreign art collection is indented under FOR 226. Foreign art collection for varying or maintaining an environmental condition for a disk drive which has structure for concurrent accommodation of multiple disks.

FOR 228 Flexible disk (360/97.04):

This foreign art collection is indented under FOR 226. Foreign art collection for varying or maintaining an environmental condition in a disk drive for a disk record carrier which is bendable or pliable without permanent change.

CLASS 361 – ELECTRICITY; ELECTRICAL SYSTEMS AND DEVICES

Definitions Modified:

Subclass 600: Under See or Search Class,

Delete:

The entire reference to Class 360.

Insert:

360, Dynamic Magnetic Information Storage or Retrieval, subclass 86 for support equipment and housing of disk record having record transport with head moving during transducing and structural details of disk record, subclasses 97.11+ for support equipment and housing of disk record having record transport with head stationary during transducing and structural details of disk record, subclasses 104+ for recorder head mounting, and subclass 129 for recorder head accessory housing.