1	INK JET	43	Color type
2	.Combined	44	Discharge means
3	Reproduction (e.g., facsimile,	45	Surface treated
J	copier, etc.)	46	Free surface
4	With conveyed object	47	Nozzles
5	.Controller	48	With plural transducers
6	Of fluid (e.g., ink flow rate,	49	Modular
	viscosity, etc.)	50	Electrical connector means
7	Fluid content (e.g., moisture	51	Optical energy acting on fluid
	or solvent content, ink	52	Electron beam acting on fluid
	refilling, liquid level)	53	Magnetic
8	Of spacing between fluid	54	Drop-on-demand
	ejector and receiving medium	55	With electric field ejection
9	Of ejector		(applied to fluid)
10	Drive waveform	56	With thermal force ejection
11	Plural pulses	57	Drive signal application
12	Array	58	Wiring
13	Full-line array	59	Integrated
14	Responsive to condition	60	Preheat
15	Creating plural tones	61	Thermal force generators
16	Of medium	62	Resistor specifics
17	Of temperature or pressure of	63	Composite ejector
	device or component thereof	64	Protective
18	With particular cooling means	65	Flow path
19	Measuring and testing (e.g.,	66	Head separate from fluid
	diagnostics)		supply
20	.Ejector mechanism (i.e., print	67	With additional feature
	head)	68	With piezoelectric force
21	With additional fluid		ejection
22	With cleaning or protector	69	Shear mode
23	Responsive to condition	70	With vibratory plate
24	For color	71	Layers, plates
25	Gas	72	Plural piezoelectric
26	Heat		laminate
27	Vibration	73	Continuous stream (includes
28	Solvent		dispersion)
29	Nozzle cap, cover, or	74	With individual drop
	protection		generation and/or control
30	Suction	75	Drop generation means
31	Absorber	76	Drop charge means
32	Movement	77	Drop deflection means
33	Wiping	78	Drop correction
34	Mist or dust removal	79	Charge compensation
35	Purging without a cap	80	Synchronization of drop
36	Waste storage		separation and charge time
37	With means to scan fluid	81	Drop sensors
	ejector relative to the	82	With stream deflection
	receiving medium	83	With aerosol formation
38	With rotary motion	84	.Fluid or fluid source handling
39	With oscillatory motion		means
40	Array of ejectors	85	Fluid supply system
41	Interlace	86	Cartridge
42	Full-line type	87	With integral ejector

88	For hot-melt fluid (e.g.,	126	Modified or specific fluid
	phase-change)		(e.g., heated, dehumidified,
89	With recirculation		specified gas)
90	Collectors or catchers	127	Laminated head including
	specifics		charged particle generation
91	With carrier		layer
92	With means to remove and/or	128	Including driving circuitry
	accommodate bubbles in the	129	Photo scanning
	fluid	130	Light emitting diodes
93	With fluid treatment (e.g.,	131	Dot density or dot size
))	filtering)	131	control (e.g., halftone)
94	With means to reduce vibration	132	Beam generator driving means
24	in the fluid (damping)	133	Having feedback or
95	Fluid (e.g., fluid specifics)	133	environmental control
96	Reactive	134	Optical elements interposed
90 97		194	between record receiver and
_	Gas		beam generator
98	Colorless	135	Light intensity modulation
99	Hot-melt (e.g., phase-change)	133	_
100	Ink	126	means
101	.Medium and processing means	136	Shutter device
102	Drying or curing	137	Lens
103	Transfer of fluid to another	138	Housing or mounting
	record medium	139	Record receiver or conveyor
104	Physical handling		means therefor
105	Receiving medium	140	Developer or charger mechanism
106	Physical characteristics	141	Specific electrostatic head
100	*****	142	a: 7 '. 1'
107	With unique pattern	142	Signal switching
107	With unique pattern .Housing	142	Signal switchingAmplitude modulation
108	.Housing	143	Amplitude modulation
108 109	.Housing Hand-held	143	Amplitude modulationTime based modulation (e.g.,
108 109	.HousingHand-held ELECTRIC MARKING APPARATUS OR	143	<pre>Amplitude modulationTime based modulation (e.g., pulse width, duty cycle, rise</pre>
108 109 111 112	.HousingHand-held ELECTRIC MARKING APPARATUS OR PROCESSES .Electrostatic	143 144	<pre>Amplitude modulationTime based modulation (e.g., pulse width, duty cycle, rise time)</pre>
108 109 111 112 113	.HousingHand-held ELECTRIC MARKING APPARATUS OR PROCESSES .ElectrostaticThermoplastic	143 144 145	<pre>Amplitude modulationTime based modulation (e.g., pulse width, duty cycle, rise time)Block driving</pre>
108 109 111 112 113 114	.HousingHand-held ELECTRIC MARKING APPARATUS OR PROCESSES .ElectrostaticThermoplasticElectrothermographic	143 144 145 146	Amplitude modulationTime based modulation (e.g., pulse width, duty cycle, rise time)Block drivingCharacter wheelSpecific head tip
108 109 111 112 113 114 115	.HousingHand-held ELECTRIC MARKING APPARATUS OR PROCESSES .ElectrostaticThermoplasticElectrothermographicMulticolor	143 144 145 146 147 148	Amplitude modulationTime based modulation (e.g., pulse width, duty cycle, rise time)Block drivingCharacter wheelSpecific head tipPrinted circuit or wiring
108 109 111 112 113 114 115 116	. Housing . Hand-held ELECTRIC MARKING APPARATUS OR PROCESSES . Electrostatic . Thermoplastic . Electrothermographic . Multicolor Registration	143 144 145 146 147 148 149	Amplitude modulationTime based modulation (e.g., pulse width, duty cycle, rise time)Block drivingCharacter wheelSpecific head tipPrinted circuit or wiringSpacing or pressure
108 109 111 112 113 114 115 116 117	. Housing Hand-held ELECTRIC MARKING APPARATUS OR PROCESSES .Electrostatic Thermoplastic Electrothermographic Multicolor Registration Plural heads	143 144 145 146 147 148 149 150	Amplitude modulationTime based modulation (e.g., pulse width, duty cycle, rise time)Block drivingCharacter wheelSpecific head tipPrinted circuit or wiringSpacing or pressureComposition
108 109 111 112 113 114 115 116 117	. Housing Hand-held ELECTRIC MARKING APPARATUS OR PROCESSES .Electrostatic Thermoplastic Electrothermographic Multicolor Registration Plural heads Using light as exposure means	143 144 145 146 147 148 149	Amplitude modulationTime based modulation (e.g., pulse width, duty cycle, rise time)Block drivingCharacter wheelSpecific head tipPrinted circuit or wiringSpacing or pressureCompositionUsing recording head to
108 109 111 112 113 114 115 116 117	. Housing . Hand-held ELECTRIC MARKING APPARATUS OR PROCESSES . Electrostatic . Thermoplastic . Electrothermographic . Multicolor Registration Plural heads Using light as exposure means Single head using light as	143 144 145 146 147 148 149 150 151	Amplitude modulationTime based modulation (e.g., pulse width, duty cycle, rise time)Block drivingCharacter wheelSpecific head tipPrinted circuit or wiringSpacing or pressureCompositionUsing recording head to selectively charge toner
108 109 111 112 113 114 115 116 117 118 119	. Housing . Hand-held ELECTRIC MARKING APPARATUS OR PROCESSES . Electrostatic . Thermoplastic . Electrothermographic . Multicolor Registration Plural heads Using light as exposure means Single head using light as exposure means	143 144 145 146 147 148 149 150 151	Amplitude modulationTime based modulation (e.g., pulse width, duty cycle, rise time)Block drivingCharacter wheelSpecific head tipPrinted circuit or wiringSpacing or pressureCompositionUsing recording head to selectively charge tonerHousing or mounting
108 109 111 112 113 114 115 116 117	.HousingHand-held ELECTRIC MARKING APPARATUS OR PROCESSES .ElectrostaticThermoplasticElectrothermographicMulticolorRegistrationPlural headsUsing light as exposure meansSingle head using light as exposure meansSy information carrying flow of	143 144 145 146 147 148 149 150 151	Amplitude modulationTime based modulation (e.g., pulse width, duty cycle, rise time)Block drivingCharacter wheelSpecific head tipPrinted circuit or wiringSpacing or pressureCompositionUsing recording head to selectively charge tonerHousing or mountingWith medium for receiving an
108 109 111 112 113 114 115 116 117 118 119	.HousingHand-held ELECTRIC MARKING APPARATUS OR PROCESSES .ElectrostaticThermoplasticElectrothermographicMulticolorRegistrationPlural headsUsing light as exposure meansSingle head using light as exposure meansShy information carrying flow of invisible charged particles	143 144 145 146 147 148 149 150 151	Amplitude modulationTime based modulation (e.g., pulse width, duty cycle, rise time)Block drivingCharacter wheelSpecific head tipPrinted circuit or wiringSpacing or pressureCompositionUsing recording head to selectively charge tonerHousing or mountingWith medium for receiving an image or feeding means
108 109 111 112 113 114 115 116 117 118 119	.HousingHand-held ELECTRIC MARKING APPARATUS OR PROCESSES .ElectrostaticThermoplasticElectrothermographicMulticolorRegistrationPlural headsUsing light as exposure meansSingle head using light as exposure meansSingle head using light as exposure meansBy information carrying flow of invisible charged particlesElectron beam generator with	143 144 145 146 147 148 149 150 151	Amplitude modulationTime based modulation (e.g., pulse width, duty cycle, rise time)Block drivingCharacter wheelSpecific head tipPrinted circuit or wiringSpacing or pressureCompositionUsing recording head to selectively charge tonerHousing or mountingWith medium for receiving an image or feeding means therefor
108 109 111 112 113 114 115 116 117 118 119 120	HousingHand-held ELECTRIC MARKING APPARATUS OR PROCESSES .ElectrostaticThermoplasticElectrothermographicMulticolorRegistrationPlural headsUsing light as exposure meansSingle head using light as exposure meansSingle head using light as exposure meansBy information carrying flow of invisible charged particlesElectron beam generator with air tight envelope	143 144 145 146 147 148 149 150 151	Amplitude modulationTime based modulation (e.g., pulse width, duty cycle, rise time)Block drivingCharacter wheelSpecific head tipPrinted circuit or wiringSpacing or pressureCompositionUsing recording head to selectively charge tonerHousing or mountingWith medium for receiving an image or feeding means thereforEndless web or belt for the
108 109 111 112 113 114 115 116 117 118 119	HousingHand-held ELECTRIC MARKING APPARATUS OR PROCESSES .ElectrostaticThermoplasticElectrothermographicMulticolorRegistrationPlural headsUsing light as exposure meansSingle head using light as exposure meansSingle head using light as exposure meansBy information carrying flow of invisible charged particlesElectron beam generator with air tight envelopeIncluding latent image	143 144 145 146 147 148 149 150 151 152 153	Amplitude modulationTime based modulation (e.g., pulse width, duty cycle, rise time)Block drivingCharacter wheelSpecific head tipPrinted circuit or wiringSpacing or pressureCompositionUsing recording head to selectively charge tonerHousing or mountingWith medium for receiving an image or feeding means thereforEndless web or belt for the latent image
108 109 111 112 113 114 115 116 117 118 119 120	HousingHand-held ELECTRIC MARKING APPARATUS OR PROCESSES .ElectrostaticThermoplasticElectrothermographicMulticolorRegistrationPlural headsUsing light as exposure meansSingle head using light as exposure meansSingle head using light as exposure meansBy information carrying flow of invisible charged particlesElectron beam generator with air tight envelopeIncluding latent image generation using luminescent	143 144 145 146 147 148 149 150 151 152 153	Amplitude modulationTime based modulation (e.g., pulse width, duty cycle, rise time)Block drivingCharacter wheelSpecific head tipPrinted circuit or wiringSpacing or pressureCompositionUsing recording head to selectively charge tonerHousing or mountingWith medium for receiving an image or feeding means thereforEndless web or belt for the latent imagePre or post treatment
108 109 111 112 113 114 115 116 117 118 119 120 121	HousingHand-held ELECTRIC MARKING APPARATUS OR PROCESSES .ElectrostaticThermoplasticElectrothermographicMulticolorRegistrationPlural headsUsing light as exposure meansSingle head using light as exposure meansSingle head using light as exposure meansBy information carrying flow of invisible charged particlesElectron beam generator with air tight envelopeIncluding latent image generation using luminescent material	143 144 145 146 147 148 149 150 151 152 153	Amplitude modulationTime based modulation (e.g., pulse width, duty cycle, rise time)Block drivingCharacter wheelSpecific head tipPrinted circuit or wiringSpacing or pressureCompositionUsing recording head to selectively charge tonerHousing or mountingWith medium for receiving an image or feeding means thereforEndless web or belt for the latent imagePre or post treatmentFixing or fusing
108 109 111 112 113 114 115 116 117 118 119 120 121 122	.HousingHand-held ELECTRIC MARKING APPARATUS OR PROCESSES .ElectrostaticThermoplasticElectrothermographicMulticolorRegistrationPlural headsUsing light as exposure meansSingle head using light as exposure meansSingle head using light as exposure meansBy information carrying flow of invisible charged particlesElectron beam generator with air tight envelopeIncluding latent image generation using luminescent materialSpecific ionographic head	143 144 145 146 147 148 149 150 151 152 153	Amplitude modulationTime based modulation (e.g., pulse width, duty cycle, rise time)Block drivingCharacter wheelSpecific head tipPrinted circuit or wiringSpacing or pressureCompositionUsing recording head to selectively charge tonerHousing or mountingWith medium for receiving an image or feeding means thereforEndless web or belt for the latent imagePre or post treatmentFixing or fusingIncluding cutter means
108 109 111 112 113 114 115 116 117 118 119 120 121	.HousingHand-held ELECTRIC MARKING APPARATUS OR PROCESSES .ElectrostaticThermoplasticElectrothermographicMulticolorRegistrationPlural headsUsing light as exposure meansSingle head using light as exposure meansSingle head using light as exposure meansBy information carrying flow of invisible charged particlesElectron beam generator with air tight envelopeIncluding latent image generation using luminescent materialSpecific ionographic headIncluding simultaneous	143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158	Amplitude modulationTime based modulation (e.g., pulse width, duty cycle, rise time)Block drivingCharacter wheelSpecific head tipPrinted circuit or wiringSpacing or pressureCompositionUsing recording head to selectively charge tonerHousing or mountingWith medium for receiving an image or feeding means thereforEndless web or belt for the latent imagePre or post treatmentFixing or fusingIncluding cutter meansIncluding toner delivery means
108 109 111 112 113 114 115 116 117 118 119 120 121 122	.HousingHand-held ELECTRIC MARKING APPARATUS OR PROCESSES .ElectrostaticThermoplasticElectrothermographicMulticolorRegistrationPlural headsUsing light as exposure meansSingle head using light as exposure meansSingle head using light as exposure meansBy information carrying flow of invisible charged particlesElectron beam generator with air tight envelopeIncluding latent image generation using luminescent materialSpecific ionographic headIncluding simultaneous development	143 144 145 146 147 148 149 150 151 152 153	Amplitude modulationTime based modulation (e.g., pulse width, duty cycle, rise time)Block drivingCharacter wheelSpecific head tipPrinted circuit or wiringSpacing or pressureCompositionUsing recording head to selectively charge tonerHousing or mountingWith medium for receiving an image or feeding means thereforEndless web or belt for the latent imagePre or post treatmentFixing or fusingIncluding cutter meansIncluding toner delivery means .By electrical discharge (e.g.,
108 109 111 112 113 114 115 116 117 118 119 120 121 122	.HousingHand-held ELECTRIC MARKING APPARATUS OR PROCESSES .ElectrostaticThermoplasticElectrothermographicMulticolorRegistrationPlural headsUsing light as exposure meansSingle head using light as exposure meansSingle head using light as exposure meansBy information carrying flow of invisible charged particlesElectron beam generator with air tight envelopeIncluding latent image generation using luminescent materialSpecific ionographic headIncluding simultaneous	143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159	Amplitude modulationTime based modulation (e.g., pulse width, duty cycle, rise time)Block drivingCharacter wheelSpecific head tipPrinted circuit or wiringSpacing or pressureCompositionUsing recording head to selectively charge tonerHousing or mountingWith medium for receiving an image or feeding means thereforEndless web or belt for the latent imagePre or post treatmentFixing or fusingIncluding cutter meansIncluding toner delivery means .By electrical discharge (e.g., spark)
108 109 111 112 113 114 115 116 117 118 119 120 121 122	.HousingHand-held ELECTRIC MARKING APPARATUS OR PROCESSES .ElectrostaticThermoplasticElectrothermographicMulticolorRegistrationPlural headsUsing light as exposure meansSingle head using light as exposure meansSingle head using light as exposure meansBy information carrying flow of invisible charged particlesElectron beam generator with air tight envelopeIncluding latent image generation using luminescent materialSpecific ionographic headIncluding simultaneous development	143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158	Amplitude modulationTime based modulation (e.g., pulse width, duty cycle, rise time)Block drivingCharacter wheelSpecific head tipPrinted circuit or wiringSpacing or pressureCompositionUsing recording head to selectively charge tonerHousing or mountingWith medium for receiving an image or feeding means thereforEndless web or belt for the latent imagePre or post treatmentFixing or fusingIncluding cutter meansIncluding toner delivery means .By electrical discharge (e.g.,

161	Electrical discharge burning	198	Adjustable
	(e.g., oxidation or electroerosion)	199	.Electroconductive recording means
162	Including driving circuitry	200	.Specific resistance recording
163	.By electrochemical		element type
164	With record receiver or	201	Edge or end face type
	handling means therefor	202	Glazed layer
165	Including treating means	203	Protective layer
166	Specific head	204	Heat resistance layer
167	Including motor for driving	205	Head substrate
_ ,	head	206	Heating resistive elements
168	Including driving circuitry	207	Having auxiliary means for
169	Helix drum	-	conducting heat
170	Housing or mounting	208	Specific conductor means (e.g.,
171	THERMAL MARKING APPARATUS OR		electrode, conducting pattern,
	PROCESSES		etc.)
172	.Multicolor	209	With means for driving or
173	Single pass		supplying current to the
174	Single-head type (e.g.,		resistive heating elements
	multipass)	210	Including switching means
175	Having multilayers colored	211	.Having driving circuitry for
	transfer material		recording means
176	Having single layer colored	212	.Pre or post image recording
	transfer material		treatment
177	Including sensor means	213	.Having an intermediate medium
178	For detecting color		for transferring ink
179	.With correction or erasing means	214	.Ink cassette or cartridge
180	.Block driving	215	.Record receiver and transfer
181	Simultaneously		medium feeding or driving
182	Sequentially		means
183	.Gradational recording	216	Including separating means
184	Look up table	217	.With transfer medium or driving
185	.Preheating		means therefor
186	Recording means	218	.Record receiver driving means
187	Transfer material or recording	219	Including tensioning means
107	medium	220	.Platen or engaging means
188	.Density control		therefor
189	In accordance with ambient	221	.With recording medium
100	temperature	222	.Housing or mounting
190	By number of heated recording	223	.Including cooling device
100	elements	224	LIGHT OR BEAM MARKING APPARATUS
191	In accordance with thermal		OR PROCESSES
171	output characteristic of the	225	.Scan of light
	recording means	226	Cathode ray device
192	By variation in power supply	227	With record receiver in an
193	By transfer material or record		evacuated enclosure
173	receiver	228	Having developing means
194	In accordance with temperature	229	Synchronization of light with
174	of the recording means	225	record receiver
195	By history of recording	230	Having optical means
100	elements		interposed between the screen
196	Using pulse width modulation		of the cathode ray device and
197	Recording means engaging or		the record receiver
±2,	holding means	231	Having deflecting means
		232	Multicolor

CROSS-REFERENCE ART COLLECTIONS

900 DATA PROCESSING FOR ELECTROSTATIC RECORDING