1 D		268	To eliminate crossover
1 R	WITH DIVERSE-TYPE ART DEVICE	200	distortion
1 A	.With process control system	269	Having field effect transistor
2	WITH AMPLIFIER CONDITION	270	Having D.C. feedback bias
2	INDICATING OR TESTING MEANS	2,0	control for stabilization
3	WITH PLURAL DIVERSE-TYPE	271	Having signal feedback means
4	AMPLIFYING DEVICES	272	Having temperature compensating
4	WITH MASER-TYPE AMPLIFYING DEVICE	2,2	means
4.5	PARAMETRIC AMPLIFIERS	273	Having particular biasing
4.6	.Traveling wave type	273	arrangement
4.7	Electron beam device	274	To eliminate crossover
4.8	.Gyromagnetic type (e.g.,	2,1	distortion
4 0	ferrite)	275	Having balanced to unbalanced
4.9	.Semiconductor type (e.g., with	2,3	circuitry and vice versa
_	semiconductor diode)	276	Having transformer
5	WITH SOLID ELEMENT WAVE	277	.Including field effect
	PROPAGATING AMPLIFYING DEVICE	277	transistor
5.5	.Phonon type (e.g., ultrasonic	278	.Including gain control means
_	wave propagating device)	279	And significant control voltage
6	WITH HALL EFFECT TYPE MEANS	273	developing means
7	WITH CAPACITIVE AMPLIFYING DEVICE	280	With delay means
8	WITH SATURABLE REACTOR-TYPE	281	With time constant means
0	AMPLIFYING DEVICE	282	Having feedback means acting as
9	WITH PERIODIC SWITCHING INPUT-	202	variable impedance
	OUTPUT (E.G., FOR DRIFT	283	Having emitter degeneration
1.0	CORRECTION)	284	Having attenuation means in
10	MODULATOR-DEMODULATOR-TYPE	201	signal transmission path
11	AMPLIFIER WITH D.C. REINSERTION CIRCUIT	285	Having particular biasing means
250	WITH SEMICONDUCTOR AMPLIFYING	286	.Including distributed parameter-
230	DEVICE (E.G., TRANSISTOR)	200	type coupling
251	.Including Class D amplifier	287	Of diode type
252	_	288	.Including current mirror
252	.Including differential amplifierHaving field effect transistor		amplifier
254		289	.Including temperature
255	Having gain control meansHaving push-pull amplifier		compensation means
233		290	-
	stage	ムラロ	Including D.C. feedback bias
256		290	.Including D.C. feedback bias control for stabilization
256	Having temperature compensation		control for stabilization
	Having temperature compensation means	291	control for stabilization .Including signal feedback means
257	Having temperature compensation meansHaving current mirror amplifier		control for stabilization .Including signal feedback meansHaving compensation for
	Having temperature compensation meansHaving current mirror amplifierHaving common mode rejection	291	control for stabilization .Including signal feedback meansHaving compensation for interelectrode impedance
257 258	 Having temperature compensation means Having current mirror amplifier Having common mode rejection circuit 	291 292 293	control for stabilization .Including signal feedback meansHaving compensation for interelectrode impedanceHaving negative feedback
257 258 259	 Having temperature compensation means Having current mirror amplifier Having common mode rejection circuit Having D.C. feedback bias control for stabilization 	291 292	control for stabilization Including signal feedback means Having compensation for interelectrode impedance Having negative feedback Having frequency-responsive means or phase-shift means in
257 258 259 260	 Having temperature compensation means Having current mirror amplifier Having common mode rejection circuit Having D.C. feedback bias control for stabilization Having signal feedback means 	291 292 293 294	control for stabilization .Including signal feedback means .Having compensation for interelectrode impedance .Having negative feedback .Having frequency-responsive means or phase-shift means in feedback path
257 258 259	 Having temperature compensation means Having current mirror amplifier Having common mode rejection circuit Having D.C. feedback bias control for stabilization 	291 292 293 294	control for stabilization .Including signal feedback meansHaving compensation for interelectrode impedanceHaving negative feedbackHaving frequency-responsive means or phase-shift means in feedback path .Including plural amplifier channels
257 258 259 260	 Having temperature compensation means Having current mirror amplifier Having common mode rejection circuit Having D.C. feedback bias control for stabilization Having signal feedback means Having particular biasing 	291 292 293 294	control for stabilization .Including signal feedback meansHaving compensation for interelectrode impedanceHaving negative feedbackHaving frequency-responsive means or phase-shift means in feedback path .Including plural amplifier channels .Including particular biasing
257 258 259 260 261	 Having temperature compensation means Having current mirror amplifier Having common mode rejection circuit Having D.C. feedback bias control for stabilization Having signal feedback means Having particular biasing arrangement 	291 292 293 294 295 296	control for stabilization .Including signal feedback meansHaving compensation for interelectrode impedanceHaving negative feedbackHaving frequency-responsive means or phase-shift means in feedback path .Including plural amplifier channels .Including particular biasing arrangement
257 258 259 260 261 262	Having temperature compensation meansHaving current mirror amplifierHaving common mode rejection circuitHaving D.C. feedback bias control for stabilizationHaving signal feedback meansHaving particular biasing arrangement .Including push-pull amplifier	291 292 293 294	control for stabilization .Including signal feedback meansHaving compensation for interelectrode impedanceHaving negative feedbackHaving frequency-responsive means or phase-shift means in feedback path .Including plural amplifier channels .Including particular biasing arrangement .Including particular power
257 258 259 260 261 262 263	Having temperature compensation meansHaving current mirror amplifierHaving common mode rejection circuitHaving D.C. feedback bias control for stabilizationHaving signal feedback meansHaving particular biasing arrangement .Including push-pull amplifierHaving complementary symmetry	291 292 293 294 295 296 297	control for stabilization Including signal feedback means . Having compensation for interelectrode impedance . Having negative feedback . Having frequency-responsive means or phase-shift means in feedback path Including plural amplifier channels Including particular biasing arrangement Including particular power supply circuitry
257 258 259 260 261 262 263 264	Having temperature compensation meansHaving current mirror amplifierHaving common mode rejection circuitHaving D.C. feedback bias control for stabilizationHaving signal feedback meansHaving particular biasing arrangement .Including push-pull amplifierHaving complementary symmetryAnd field effect transistor	291 292 293 294 295 296 297 298	control for stabilization .Including signal feedback meansHaving compensation for interelectrode impedanceHaving negative feedbackHaving frequency-responsive means or phase-shift means in feedback path .Including plural amplifier channels .Including particular biasing arrangement .Including particular power supply circuitry .Including protection means
257 258 259 260 261 262 263 264 265	Having temperature compensation meansHaving current mirror amplifierHaving common mode rejection circuitHaving D.C. feedback bias control for stabilizationHaving signal feedback meansHaving particular biasing arrangement .Including push-pull amplifierHaving complementary symmetryAnd field effect transistorAnd feedback means	291 292 293 294 295 296 297	control for stabilization .Including signal feedback meansHaving compensation for interelectrode impedanceHaving negative feedbackHaving frequency-responsive means or phase-shift means in feedback path .Including plural amplifier channels .Including particular biasing arrangement .Including particular power supply circuitry

300 301	Bipolar or unipolar (FET) .Including balanced to unbalanced	59	HAVING LIGHT-CONTROLLED OR ACTIVATED DEVICE (I.E., NOT
	circuits and vice versa		LIGHT SIGNAL)
302	.Including frequency-responsive means in the signal	60	HAVING MAGNETOSTRICTIVE-TYPE AMPLIFYING DEVICE
	transmission path	61 R	WITH RESISTIVE-TYPE AMPLIFYING
303	Including an active device in		DEVICE
	the filter means	62	.Magnetoresistive type
304	And equalizing means	61 A	.Negative resistance amplifiers
305	And tuning means	63	WITH MAGNETIC MEANS AMPLIFYING
306	And bandpass, broadband (e.g.,		DEVICE
	wideband) or sidepass means	64	WITH SPACE CHARGE GRID TUBE
307	.Integrated circuits	65	INVOLVING STRUCTURE OTHER THAN
308	.Including atomic particle or		THAT OF TRANSFORMERS PER SE
	radiant energy impinging on a	66	.With printed circuits
	semiconductor	67	.With capacitive structure
309	.Involving structure of three	68	.With shielding means
	diverse function electrode	69	SUM AND DIFFERENCE AMPLIFIERS
	type	70	ANODE ENERGIZED THROUGH DISCHARGE
310	.Including plural stages cascaded		PATH OF CONTROLLED VACUUM TUBE
311	Having different configurations	71	.Plural discharge paths traversed
41	WITH GAS OR VAPOR TUBE AMPLIFYING		by anode supply
	DEVICE	72	Amplifier devices in arms of a
42	WITH SECONDARY ELECTRON EMISSION		bridge
	TUBE AMPLIFYING DEVICE	73	.Plural outputs
43	WITH TRAVELING WAVE-TYPE TUBE	74	.Separate signal inputs to series
44	WITH ELECTRON BEAM TUBE		devices
	AMPLIFYING DEVICE	75	SIGNAL FEEDBACK
45	.Having electrode coupled to	76	.Compensating for inter-electrode
	cavity resonator		impedance (e.g.,
46	.Having deflecting means		neutralization)
47	WITH MAGNETICALLY INFLUENCED	77	At least one push-pull stage
	DISCHARGE DEVICE (E.G.,	78	To or from electrode common to
	MAGNETRONS)		input and output
48	.Having signal applied to	79	By transformer feedback
	magnetic means	80	By coil in parallel to and
49	WITH VACUUM TUBE HAVING		resonating with inter-
	DISTRIBUTED PARAMETER		electrode capacity
	IMPEDANCE CHARACTERISTICS	81	.At least one push-pull signal
50	WITH DUMMY TUBE		stage
51	COMBINED WITH AUTOMATIC AMPLIFIER	82	Positive and negative feedback
	DISABLING SWITCH MEANS	83	Including D.C. path for signal
52	WITH PILOT FREQUENCY CONTROL	0.5	feedback
	MEANS	84	.Plural amplifier channels
53	WITH DISTRIBUTED PARAMETER-TYPE	85	.Amplifier in signal feedback
	COUPLING MEANS		path
54	.Distributed amplifier	86	.Variable impedance in feedback
55	.Push-pull		path varied by separate
56	.Waveguide, cavity, or concentric		control path
	line resonator	87	.Cathode impedance feedback
57	.Artificial line	88	Cascade amplifier stages with
58	WITH ROTATING DYNAMOELECTRIC		cathode-cathode feedback
	AMPLIFYING DEVICE	89	Between adjacent stages

CLASS 330 AMPLIFIERS 330 - 3

90	Combined with diverse-type	120	.Interstage coupling between
0.1	feedback coupling	101	push-pull
91	Diverse feedback to or from	121	D.C. coupling
0.0	cathode	122	.Input and/or output coupling for
92	Feedback to cathode impedance	100	push-pull
0.2	of a prior stage	123	.Power or bias supply circuits
93	Including positive feedback	104 B	and control thereof
94	Frequency responsive means in	124 R	WITH PLURAL AMPLIFIER CHANNELS
	cathode impedance feedback		(E.G., PARALLEL AMPLIFIER
0.5	path	105	CHANNELS)
95	Nonlinear impedance means in	125	.D.C. and A.C. amplifier channels
	cathode impedance feedback	126	.Amplifying different frequencies
0.6	path	104 B	in different channels
96	.Combined with control of bias	124 D	.Redundant amplifier circuits
0.7	voltage of signal amplifier	127	WITH CONTROL OF POWER SUPPLY OR
97	.Including D.C. path for signal	100	BIAS VOLTAGE
0.0	feedback	128	.Control means for anode of
98	.In cascade amplifiers	100	screen grid circuit
99	Multiple feedback	129	.With control of input electrode
100	A feedback to input of a prior	120	or gain control electrode bias
101	stage	130	Bias controlled by separate
101	.Positive and negative feedback	404	external control source
	in same path at different	131	Control of bias on separate
100	frequencies	100	gain control electrode
102	.Current and voltage feedback	132	Frequency selective means to
103	.Multiple feedback paths		select control signal from
104	Positive and negative feedback	122	amplifier channel
105	.From impedance in series with	133	Different bias control means
	output load (e.g., current		for different stages of
106	feedback)	124	cascade amplifier
106	.In series with input source	134	Plural different bias control
107	.Phase shift means in loop path		voltages provided by separate
108	.Potentiometer common to signal	125	means
100	and feedback path	135	Amplitude limiting or bias
109	.Frequency responsive feedback	136	voltage
110	means	136	Bias control signal from input
110	.Nonlinear impedance element in	127	of amplifier
444	loop path	137	Oscillator supplies or controls
111	.To or from an auxiliary grid or	120	bias
110	to the anode	138	Bias controlled by biased
112	.Positive feedback	120	rectifier or discharge device
113	POLYPHASE POWER SUPPLY (I.E., FOR	139	Electronic tube controls bias
	AN ELECTRODE, CATHODE HEATER,	140	Rectifier in bias control
114	OR FILAMENT)	1 4 1	circuit
114	UNRECTIFIED A.C. POWER SUPPLY FOR	141	Time constant circuit in bias
	AN ELECTRODE (I.E., NOT THE	1.40	control circuit
115	HEATER)	142	Cathode resistor supplies bias
115	.Applied to filamentary cathode	1 / 2	(e.g., self-biasing circuits)
116	WITH BALANCED-TO-UNBALANCED	143	THERMALLY RESPONSIVE IMPEDANCE
117	COUPLING	144	VARIABLE IMPEDANCE FOR SIGNAL
117	WITH UNBALANCED-TO-BALANCED		COMMEND DAME
110	COUPLING	1/5	CONTROL PATH
118	INCLUDING A PUSH-PULL STAGE	145	Electron tube or diode as
119	.Coupling to or from cathode in		impedance
	push-pull		

146	WHEATSTONE BRIDGE WITH AMPLIFIER IN AT LEAST ONE ARM	178	With R or L in series between stages
147	PLURAL SIGNAL INPUTS	179	L in anode or grid circuit
148	PLURAL SIGNAL OUTPUTS	180	With R in anode and grid
149	HUM OR NOISE OR DISTORTION	100	circuit (RC coupling)
	BUCKING INTRODUCED INTO SIGNAL	181	.D.C. coupled
	CHANNEL	182	With series reactive element
150	CASCADED SIMILAR AMPLIFYING	102	between stages
130	DEVICE OF DIFFERENT	183	With nonlinear device
	CHARACTERISTICS	184	With series resistance between
151	WITH AMPLIFIER BYPASS MEANS	104	stages
	(E.G., FORWARD FEED)	185	INPUT NETWORKS
152	CASCADED DIFFERENTLY COUPLED	186	.To cathode
152	BETWEEN STAGES	187	
153	.Including a cathode follower	_	D.C. coupled
133	stage	188	.Transformer coupled
154	.Transformer or resonant circuit	189	With additional impedance
134	in interstage coupling (e.g.,		connected to "P" or "S"
		100	circuits
1 5 5	stagger tuning)	190	With transformer structure
155	UNICONTROL OF COUPLING OR THE	191	.D.C. coupled
1 - 6	CIRCUITS ASSOCIATED THEREWITH	192	OUTPUT NETWORKS
156	BOOTSTRAP COUPLING	193	.From cathode
157	INTERSTAGE COUPLING	194	D.C. coupled
158	.Coupling to cathode	195	.Transformer coupled
159	D.C. coupling	196	With additional impedance
160	.Coupling to plate or auxiliary		connected to "P" or "S"
	grid		circuit
161	D.C. coupling	197	With transformer structure
162	.Output coupling from grid	198	.D.C. coupled
163	D.C. coupling	199	WITH POWER OR BIAS VOLTAGE SUPPLY
164	.With electronic tube or diode in	200	.For plural stage amplifier
	coupling circuit	201	Filamentary cathodes heated by
165	.Transformer coupling		anode current or anode supply
166	With additional reactive		source
	coupling	202	.For anode
167	With additional impedance	203	And input electrode
	connected to "P" or "S"	204	.For input electrode
	circuits	205	And filamentary cathode
168	From cathode	206	.For filamentary cathode
169	With means for adjusting	207 R	MISCELLANEOUS
	inductive coupling	207 A	.Class D
170	With shielding	207 A 207 P	
171	With transformer structure	207 P	.Amplifier protection means
172	.Coupling from cathode		
173	D.C. coupling		
	.With electromechanical		
174		<u>FOREIGN</u>	ART COLLECTIONS
	transducer (e.g.,		
175	piezoelectric crystal)	FOR 000	CLASS-RELATED FOREIGN DOCUMENTS
175	.With lattice or Wheatstone		
	bridge network in coupling		
176	circuits		
176	.With T, H, or Pi network in		
455	coupling circuit		
177	.With coupling or blocking		
	capacitor		