

Patents Granted in India

Sr. No.	Patent Title	Patent No.
1	An Inexpensive Chemical Method of Dicing A Semiconductor Slice For The Manufacture Of Transistor Family Devices	86639
2	An Improved Vacuum Whirl or For Applying Thin & Uniform Coating of an Emulsion on A Wafer	97444
3	Improvements in or relating to condenser microphones	104209
4	Improvements in or relating to foster-seely tupe discriminator circuit	109904
5	Improvements In or Relating To The Wide Band Double Tuned Coupled Lf Amplifiers For TV Receivers	109905
6	Improvements In or Relating Flywheel Synchronization Circuits for TV Receivers	112185
7	Improvements In or Relating To Gain Control Circuits For TV Receivers	109604
8	An injected beam crossed field tube	112217
9	Improvements In or Relating To Video Amplifiers	109906
10	Improvements In or Relating To Electrolytic Deposition Of Gold On Kovar	121151
11	Improvements In or Relating To Fabrication Of Bipolar Monolithic Integrated Circuits	123311
12	A Method of Making Anode Block for Magnetrons and Apparatus Therefor	125605
13	An Injected Beam Type Crossed Field Tube with Improved Kino Long Gun	125852
14	Improvements In or Relating To Wire Helix Winding For Electronic Devices Such As Travelling Wave Tubes (TWT)	126064
15	Improvements in or Relating to the Manufacture of Twisted Ware guides And Jigs Thereof	127269
16	Improved Log Periodic Dipole Antenna for Beam Compression And Gain Improvement	127322
17	Improvements In and Relating To Glass to Metal Seals for Encapsulation of Semiconductor Devices	131174
18	A Wafer Carrier for Furnace Loading Unloading and Carrying Semiconductor Wafers	131255
19	Improvements In or Relating To the Manufacture Of A Multiple-Probe- Head For Measuring Resistivity	135146
20	Transmission systems	136172
21	Improvements In or Relating To Printing Dots Or Such Other Patterns On The Semiconductor Materials Such As Silicon, Germanium Or Microscopic Glass Slides Or Ceramic	135145
22	Substrate Heater cum Holder for Thin Film Deposition	136265
23	A Horizontal Deflection Coil Winding Machine for Winding Deflection Coil For Tele Vision Receivers	136492
24	A vertical deflection coil winding machine	136493
25	An Improved Die for Making Glass Headers	135304
26	A toroidal winding machine	137075
27	A Soldering Bit for Desoldering Dual Inline Integrated Circuit Packages and Sockets	137629

28	A Machine for Drilling Holes in Printed Circuit Boards	138234
29	Device for Locking Deflection Coil to TV Picture Tubes	138601
30	Improvements relating to high frequency step attenuators	138931
31	Apparatus and Improvements In or Relating To Chemically Thinning and Polishing Semiconductor Wafers	140378
32	Improvement in or Relating to Boundary Layer Flow meter	140375
33	A Novel Apparatus for Oxidation of Silicon Wafers For The Fabrication Of Semiconductor Device	141286
34	An Apparatus for Diffusion of Impurities in Semiconductors Using Liquid Dopants	141287
35	An Improved Design of Multichannel Multi-Band TV Antenna	141607
36	Improved Feeder for Flash Evaporation of Nickel-Chromium Powder for the Fabrication of Thin Film Hybrid Integrated Circuits	141912
37	A Device for Continuously Feeding Aluminium Wire Contained In a Spool to a Heated Tungsten Strip	141956
38	Improvements In or Relating To Fabrication of Resist Or Array Circuit On Epoxy Glass Substrate	141914
39	A Hand Operated Machine for Winding Horizontal Deflection Coils for TV	141755
40	Improvements In or Relating To Electret Condenser Microphones	142130
41	A Process and an Apparatus for Imparting Hard and Stable Characteristics to Semiconductor Devices	142272
42	A Novel Device for Evaporating Silicon Monoxide Thin Film on Glass alumina Substrates Used for the Fabrication of Hybrid Integrated Circuit	142592
43	A Method of Manufacturing an Etchant for Selective Etching of Silicon Monoxide Film Deposited On Glass Plate for Fabricating Thin Film Capacitors	142247
44	A Device for Picking up Vibration Such As Voice Signals Directly from the Throat	142698
45	An Improved Process for Vacuum Deposition Of Aluminium On Substrates	142968
46	A Device for Picking Up Undulations on A Moving Disc Record Groove	143062
47	A Device for Making Sintered Glass Headers for Electron Tubes	143304
48	An Electrolytic Cell for Anodic Oxidation of Conductors/Semiconductors	143356
49	Logic Control System for 12 Step Three Phase Thyristor Inverter	143265
50	Magnetically Operated Long Term Viewport for Observing Vacuum Process	141913
51	A Process for The Manufacture Of Semiconductor Devices Such As Mesa Devices	143685
52	An improved mobile amplitude modulated Trans receiving apparatus	143683
53	A Silicon Halide Evaporator for Obtaining Constant Resistivity of Silicon Epitaxial Layer On Silicon	143684
54	An Improved Process for the Fabrication of Thin Film Capacitors	143706
55	A Hand Winding Machine for Winding Coils on Multiple Legs of a Former	143908
56	Improvements In or Relating To the Manufacture of Grids for	143016

	Transmitting Tubes Having Throated Tungsten Cathodes	
57	Improvements In or Relating To Device For Depositing Homogeneous And Pin Hole Free Films Of Dielectric Materials On Substrates	146328
58	Improvement In or Relating To a Process of Manufacturing Of Thin Film Resistors Resistor Networks And Or Hybrid	147322
59	An Improved Device for the Conversion of a Signal from Transducer to Linear Digital from Suitable For Display	153546
60	An Improved Antenna Device for Omnidirectional Radio Communications	153551
61	Improved Process for the Production of Nickel-Chromium And Aluminium Film Resistors On Glass Alumina Substrates	153803
62	An electronic device for measuring the internal pressure in sealed containers	153766
63	An audio visual film strip projector device for frame by frame projection of a film strip	153861
64	A logic control device for generating pulse-width-modulated pattern adapted for a smooth switch over to a six step mode of operation of inverter systems	156535
65	An improved hall probe device use in the measurement of magnetic fields	154387
66	Device for measuring the true ac resistivity of a liquid	155299
67	An improved process for manufacture of silicon varactor diode from epitaxial wafer	159410
68	A digital set point proportional control device for use with precision unit operations in the chemical industry	158816
69	An electronic process control device for use as digital dual set point controllers	159026
70	An apparatus for precision low temperature vapour deposition of thin film coatings on water substrates	159316
71	A device for on line estimation and display of brix purity and supersaturton of sugar massecuite boiling in closed vessel under vacuum	160668
72	Improvements in or relating to frequency agile magnetron	163102
73	Swing blade crosswind axis turbine	163395
74	A process for the manufacture of submicron gate gas mesfets using contact photolithography	165431
75	An improved electronic chip	168044
76	A microprocessor based consistency/viscosity monitor	170901
77	A process for the formation of stencil for solder cream printing on thick film hybrid circuit	171013
78	A digital indicator for comparing digital multiset prints with a single set of digital comparators	171017
79	A device for monitoring neutral to ground voltage for the protection of electronic equipment	173902
80	A process for the manufacture of sputtering targets of ceramic compounds useful for the preparation of high temperature superconducting thin films	174002
81	An electron emitting device for high resolution electron optical instruments	174341

82	An apparatus for producing extremely fine tips of edectrodytically etchable materials	175172
83	High current measuring device for direct and alternating current power circuits with complete isolation	175514
84	An improved process for the texturization of substrate surfaces	177070
85	A device for on-line sensing, monitoring and display of level of industrial conducting liquids and slurries with current loop interface	177724
86	An improved process for the production of steam by burning bagasse	177915
87	A two-wire digital current type control signal transmission system for precisely controlling remotely located stepper motors	179092
88	A two-wire analogue current type control signal transmission system for precisely controlling remotely located stepper motors	179081
89	Equipment for time sharing of single ac motor soft starter with more number of ac motors	179713
90	An electronic device for high speed peer to peer data communication	179792
91	An improved process for the production of high frequency semiconductor devices	182301
92	An improved process of fabricating packages for micro and mm-wave injection controlled transit time effect semiconductor devices	182726
93	An improved process of controlled thinning of semiconductor wafer during fabrication of micro and mm-wave injection controlled transit time effect semiconductor devices	183053
94	An improved process for the preparation of thin superconducting films of ceramic oxides	183833
95	An analog current control signal transmission system for controlling stepper motor operated control valve plug position	184778
96	A device useful for scaring birds	184865
97	A ceramic composition useful in the fabrication of zirconia cells	184773
98	A process for the preparation of an improved silicon wafer containing titanium disilicide film for the fabrication of integrated circuits or related devices	185817
99	An improved process for impregnation of active emissive compound into sintered porous tungsten matrix cathode pellet	185977
100	A novel process of fabricating millimetre wave injection controlled transit time effect semiconductor devices.	186056
101	A device useful for interfacing a time segmented speech interposition scrambler and a communication channel and a voice scrambling communication system incorporating the said device	186381
102	An improved process for selective electroplating of noble metals in fabrication of heat sink for high frequency injection controlled transit time effect semiconductor devices	186983
103	An improved process for the preparation of silicon wafer containing tungsten silicide film useful for making integrated circuits and related devices	187422
104	A ceramic composition useful for cataphoretic coating of filaments/heaters used in vacuum tubes	188322
105	A device useful for automatic sulphur burner control	189160
106	An improved process for fabrication of silicon varactor diodes useful for electronic tuning applications	194357

107	An electronic device useful for measuring three dimensional model and ground coordinates from stereo photogrammetric instruments	196743
108	A process for the manufacture of electronic devices such as hybrid microcircuits printed circuit boards and passive components	199865
109	An improved process for fabrication of metal grids used in electron tubes	197091
110	A process for the fabrication of improved conductor for power thick film hybrid micro circuits micro wave integrated circuits (phmcs)	228263
111	A process for joining metal-to-thick-film composite system on insulating substrate	199610
112	A device useful for sensing ammonia and nitrogen oxide(s) gases at room temperature	199919
113	A process for the fabrication of improved metallised ceramic substrate useful for assembly of semiconductor devices	213221
114	A process for the preparation of an improved thick film resistor useful for making strain gauge upto 1000	215172
115	A process for the preparation of an improved thick film resistor useful for making strain gauge with enhanced gauge factor upto 1000	215343
116	An improved process of fabricating metallized substrates useful for making electronic devices and circuits	215777
117	An improved process for the fabrication of smooth vertical side walled deep trenches (110) orientation silicon wafers useful for making semiconductor devices	215864
118	A process for the manufacture of improved micro thin film useful as low relative humidity sensor, a low relative humidity sensor made thereof and a humidity measuring device made therefrom	218369
119	A process for the preparation of metallic paste and its use in diffusion soldering	224578
120	A novel process for manufacturing silicon nanostructures in single crystalline silicon and silicon nanostructures made thereby useful for making electronic devices	231612
121	A process for diffusion soldering	233097
122	A process for manufacture of ion-sensitive field-effect transistor (isfet) with a high aspect ratio	260489
123	A novel process for brazing of copper impregnated graphite with other materials	283409
124	A simple and effective method of localization and identification of trapped miners in coalmines	297571
125	Design and fabrication of lab on chip for blood plasma and cell separation and blood cell counting	335009
126	A novel sheet-beam plasma cathode electron (spce) gun and its beam diagnostic using innovative dielectric charging technique	359771
127	A multi-beam klystron cavity	368846
128	A method and a system based on voltammetry for characterization and discrimination of liquids	392311
129	Security threads for banknotes using high-contrast subwavelength gratings	392467
130	Planar solar concentrators using subwavelength gratings	405073
131	A 20 kv/20 kA linear aperture radial multichannel pseudospark switch	428490

