

## Indian Granted Patents

Title of Invention	Application Number	Patent Number
A process for preparing new phenolic resins	64/MAS/73 28.4.73	137274 27.3.76
Process for preparing novel condensation products trihydroxybenzenes and acetone	165/MAS/73 9.11.73	140188 15.10.76
Improvements in or relating to the manufacture of silicone based putties	122/MAS/75 25.8.75	141877 13.01.78
A process for the production of hydrocarbons from vegetables oils	15/MAS/76 24.01.76	143962 12.4.78
Process for the production of polyols	16/MAS/76 24.01.76	143864 11.5.79
Production of polyols containing basic nitrogen	38/MAS/78 17.3.78	146818 23.8.80
A fire extinguishing composition and a method for preparing the same	64/MAS/78 06.05.78	147483 22.5.80
A process for the production of polyhydroxyester resins	129/MAS/80 11.7.80	149900 2.8.82
An improved process for producing polyols	36/MAS/80 21.2.80	149126 31.12.81
A process for picduction of fire retardant ricid polyurethane foam	172/MAS/81 18.9.81	153437 20.9.85
A method and a machine for continuously producing fibre reinforced plastics structural sections of uniform cross sections	130/MAS/81 09.07.81	153872 20.12.84
A light pointer	133/MAS/1982 16.06.82	156709
A microfische camera	148/MAS/1982 19.07.82	156712
A dual densitometer	147/MAS/1982 15.07.82	156711
A drum scanner imager	91/MAS/1983 30.04.83	160232 30.7.84
An electro-optic instrument to measure agronomical parameter	1059/MAS/84 31.12.84	163017 17.02.89

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A process for making an improved anode for electrochemical production and the improved anode thereof	621/MAS/85 08.08.85	164470 11.11.94
an improved process for preparing metal coated dielectric substrates and metal coated substrates there of	897/MAS/85 7.11.85	165240 15.9.89
Improvements in/or relating to vacuum/electrolytic coating of metals on metallic or dielectric substrate	93/MAS/86 10.2.86	166955 4.10.90
a process for preparing a front or rear surface electrically conducting silver reflector having improved optical and durability properties and the reflector so prepared	786/MAS/86 30.09.86	167910 28.1.91
a process for preparing a front surface reflector and a front surface reflector thereof	787/MAS/86 6.10.86	168744 17.7.91
A film drier	443/MAS/1986 09.06.86	167571 17.11.90
An optical reflecting projector	445/MAS/1986 09.06.86	167632 24.11.90
A three coordinate viewer for use in the study of photographs	444/MAS/1986 09.06.86	167535 10.11.90
A device for electropolishing	483/MAS/87 06.7.87	169934 01.01.93
A process for preparing a durable antireflector having improved transmission for improved infrared rays	789/MAS/87 2.11.87	170292 02.04.93
Additive colour viewer for analysis and interpretation of remote sensing data	331/MAS/1987 08.05.87	167194 15.06.90
Domestic electric shock protector	103/MAS/88 18.2.88	167460 21.9.90
Gold plating on magnesium lithium alloys	468/MAS/88 5.7.88	170548 14.05.92
A process for chromate coatings on magnesium-lithium alloys	467/MAS/88 5.7.88	170666 28.5.92
Process for producing a coated substrate made of materials such as metals, dielectric or semi-conduct or, coated with diamond like carbon having improved optical and durability properties	278/MAS/88 2.5.88	171172 29.10.93

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Process for producing a rear surface black chrome coated dielectric substrate having improved optical and durability properties	280/MAS/88 2.5.88	171053 15.10.93
Gold plating on Aluminium alloys	715/MAS/88 11.10.88	171728 4.3.93
A process for preparing a propellant grain	854/MAS/88 30.11.88	172236 6.5.94
A thin foil heat flux sensors and a method of manufacturing it	316/MAS/88 12.05.88	170640 24.12.92
A process for preapring a novel fire extinguishing powder (OLFEX)	514/MAS/89 5.7.89	172692 29.7.94
A process for black alloy nickel plating on stainless steel	82/MAS/90 31.1.90	173833 17.08.94
An improved process of anodising titanium alloys	83/MAS/90 31.1.90	173110 28.02.94
A novel process for the production of high purity precipitated silica from rice husk ash	211/MAS/90 21.3.90	174078 31.3.95
A process for production of multilayer, multi-composition solid propellant grain for performance of efficient power plant	709/MAS/90 05.9.90	176648 04.09.96
An improved process of electroslag refining or casting with inoculation	746/MAS/90 19.9.90	178085 24.10.97
A compact multiband antenna feed assembly for prime focus antenna	667/MAS/91 05.09.91	179299 06.10.97
A process of gold plating on titanium alloys	207/MAS/91 12.3.91	177292 27.06.97
An improved process of gold plating on substrates of magnesium alloy	890/MAS/91 3.12.91	179456 10.7.98
A process of integral black anodizing on magnesium alloys	206/MAS/91 12.3.91	179637 7.8.98
A process of galvanic black anodising on magnesium lithium alloy substrates	889/MAS/91 3.12.91	179671 14.08.98
A process of black chromate coating on magnesium-aluminium alloys	356/MAS/92 11.6.92	180666 05.03.99

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A multiband antenna system for operating at L-band, S-band and UHF band	925/MAS/93 21.12.93	182067 20.08.99
Mechatronic hydraulic valve	37/MAS/94 21.1.94	182069 20.8.99
Improved universal testing machine	778/MAS/94 16.8.94	184705 12.4.2001
Improved impact testing machine for measuring dynamic fracture toughness of engineering materials	762/MAS/94 11.8.94	184386 2.3.2001
an improved process for producing dielectric substrates with multilayer antireflector coatings and a dielectirc substrate with multilayer antireflector coatings thereon	905/MAS/94 15.9.94	184129 8.1.2001
An improved colour reversal process for producing colour prints	566/MAS/95 15.5.95	189927 27.02.04
Single component flushing system	398/MAS/95 31.3.95	189912 13.6.2003
A multichannel automated static load testing machine	1356/MAS/95 19.10.95	191228 31.05.2004
A pressure controlled water evaporative refrigeration system	70/MAS/96 16.01.96	191409 31.5.2004
A process for hydrothermal Production of active copper oxide	1731/MAS/96 01.10.96	194529 19.12.2005
A portable device for automatic non-destructive testing of panels	2237/MAS/96 11.12.96	212359 3.12.2007
A composite propellant containing active copper oxide and a process for preparing the same	241/MAS/97 06.02.97	226107 10.12.2008
A process for hard-anodizing aluminium and its alloys	515/MAS/97 12.3.97	196377 26.12.2005
A process for anodizing and inorganic black colouring of aluminium and its alloy	516/MAS/97 12.3.97	193881 25.1.2006
A flexible electrical heater suitable for flat surface mounting and a method of making the flexible electrical heater (ISROFLEX heaters)	2594/MAS/97 13.11.97	204476 22.02.07

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An integral diaphragm absolute pressure transducer	2025/MAS/98 8.9.98	204437 21.02.2007
A waveguide transducer assembly for efficient excitation of circular waveguides	2738/MAS/98 7.12.98	198098 30.01.2006
A high density hybrid integrated circuit package having a flip-con structure and a method of manufacturing the same	1120/MAS/99 16.11.99	207442 13.6.2007
A process for producing acrylic copolymers with pendent phenol functions.	453/MAS/99 21.4.99	210232 25.9.2007
A process for the preparing addition curable phenolic resin	449/MAS/99 21.4.99	206786 11.5.2007
A process for producing tack-free non-melting acrylic film adhesives	452/MAS/99 21.4.99	206788 11.5.2007
A process for synthesising high molecular weight acrylic copolymers with pendant epoxy groups	451/MAS/99 21.4.99	206787 11.5.2007
A curable coating composition containing hydroxy poly siloxane and a process for preparing the same	979/MAS/99 07.10.99	206804 11.5.2007
A low density curable coating composition and a process for preparing the same	1113/MAS/99 15.11.99	204527 22.02.2007
A composite solid propellant composition based on hydroxyl terminated polybutadiene and a process for making the same	1091/MAS/99 11.11.99	217041 24.3.2008
A process for producing thermo setting adhesive from acrylic co-polymers having pendant phenolic groups	454/MAS/99 21.4.99	210136 21.09.2007
A curable silicon rubber composition for making vibration isolators	1167/MAS/99 2.12.99	210136 21.09.2007
A process for the synthesis of boron and silicon containing preceramic oligomers	798/MAS/99 06.08.99	208583 2.8.2007
A Vulcanizable rubber based insulator composition	450/MAS/99 21.4.99	217063 24.3.2008
A film casting machine and process for producing polyimide films	956/MAS/99 28.9.99	214017 23.01.2008

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A process for producing polycarbosilane, a ceramic precursor from polysilahydrocarbon	741/MAS/99 14.7.99	213967 23.01.2008
A process for preparing alpha crystalline ferric oxide	547/MAS/99 12.5.99	210164 21.09.2007
A cathode for an aqueous secondary cell and method of manufacturing the same	1166/MAS/99 03.12.99	240393 07.05.2010
A process and a device for producing magnesium lithium alloy	1202/MAS/99 20.12.99	210179 25.09.2007
A process for the synthesis of crosslinked polysilahydrocarbon	1164/MAS/99 02.12.99	206762 11.5.2007
A process for producing novel alloy steel of improved tensile strength	870/MAS/99 01.09.99	214419 12.02.2008
A precision slipring for tracking radars and instruments and a method of making the same	544/MAS/99 11.5.99	210246 25.9.2007
A non-destructive moisture sensor	1051/MAS/99 29.10.99	216467 13.03.2008
An ultrasonic liquid level sensor	742/MAS/99 14.7.99	213968 23.01.2008
A shape memory alloy step drive mechanism	121/MAS/2000 17.2.2000	206763 11.5.2007
A deployable solar sail assembly for satellites and a method of making it	951/MAS/2000 09.11.2000	207705 20.6.2007
A low shock ball-lock separation mechanism for separating upper stage and satellites from a space launch vehicle	36/MAS/2000 13.1.2000	213933 23.01.2008
A high frequency slipring with embedded bearings for radars	28/MAS/2000 12.1.2000	213925 23.01.2008
A process for the synthesis of 4, 4' -dihalobenzophenones	286/MAS/2000 17.4.2000	213926 23.01.2008
A process for the synthesis of polyarylene ether ketone resins	292/MAS/2000 18.4.2000	206778 11.05.2007

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A process for synthesising a hydroxy terminated glycidyl azide polymer	856/MAS/2000 10.10.2000	207299 04.06.2007
A Detonator Assembly	879/MAS/2000 16.10.2000	224638 21.10.2008
A process for the synthesis of siloxane-imide-epoxy resins	278/MAS/2000 12.4.2002	216620 17.3.2008
An electro mechanical safe-arm device for controlling pyrotechnically actuatable systems	651/MAS/2000 16.8.2000	210266 25.09.2007
A silver-graphite brush block and a method of producing the same	985/MAS/2000 21.11.2000	210655 8.10.2007
A method and an apparatus for manufacturing thin webbed solid propellant grains for propellant motors	271/MAS/2001 26.03.2001	207452 13.6.2007
A waveguide rotary joint	310/MAS/2001 10.04.2001	207455 13.6.2007
An opto-electronic apparatus for static and dynamic measurements	337/MAS/2001 24.4.2001	206292 23.4.2007
A system for experimental mechanics applications	376/MAS/2001 09.05.2001	216641 17.03.2008
A high speed differential encoder	447/MAS/2001 06.06.2001	207522 14.6.2007
A method of manufacturing a substrate of aluminium or its alloy with an anodised electrically conducting surface	573/MAS/2002 30.07.2002	210250 25.9.2007
A process for producing siloxane polymers having atomic oxygen resistance and a method of producing articles coated therewith	279/MAS/2002 12.4.2002	216622 17.03.2008
A retractable cum variable height container	380/MAS/2003 05.05.2003	206295 23.4.2007

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A room temperature curable flame retardant composition	110/MAS/2003 07.02.2003	206764 11.5.2007
A breach mechanism for conducting simulating tests for bird hit on aircraft	197/MAS/2003 10.03.2003	210199 25.09.2007
A method for processing spaceborne sliding spotlight synthetic aperture radar signal for extended azimuth coverage	76/CHE/2004 30.01.2004	201926 30.08.2006
A method for noise reduction in data acquisition systems	48/CHE/2004 22.1.2004	204289 13.2.2007
A method and a system for a multi-channel current monitoring	97/CHE/2004 09.02.2004	220157 16.5.2008
Linear electro-mechanical actuator	768/CHE/2004 05.08.2004	205710 09.04.2007
A process safe detonator	797/CHE/2004 11.8.2004	205207 22.03.2007
Method and system for pulsed signal strength measurement in Radio Frequency signals	844/CHE/2004 24.8.2004	217004 24.3.2008
A passive device for improving stability of a Jet Flame	240/CHE/2004 18.3.2004	202158 18.09.2006
A process for the synthesis of siloxane-imide-epoxy resins	1002/CHE/2005 25.7.2005	228944 13.2.2009
High purity porous silica fiber-silica matrix composite and a method of manufacturing thereof	47/CHE/2005 19.01.2005	253851 29.08.2012
An adhesive composition and a process of bonding rubber to metals and alloys	15/CHE/2005 11.1.2005	256945 16.8.2013
Liquid Depletion Sensor	114/CHE/ 2005 11.02.2005	248462 18.07.2011
A control circuit for diode based RF circuits	466/CHE/2006 03.02.2006	229296 16.2.2009
A method for producing an improved balloon for assessing wind profile in upper atmosphere	22/CHE/2006 04.1.2006	240333 05.05.2010



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A plasma generator of high thermal energy for evaluating heat insulation materials at high temperature	1711/CHE/2006 19.09.2006	237839 11.01.2010
A system and a method for secured data communication in computer networks by phantom connectivity	1190/CHE/2006 7.7.2006	230732 27.02.2009
A device for compensating the effect of temperature variation on brightness of light emitting diodes	1591/CHE/2006 1.9.2006	235617 09/07/2009
A device and method for making mechanically active parabolic microwave antenna	1464/CHE/2006 18.08.2006	241032 16.06.2010
Microwave antenna reflectors	1809/CHE/2006 28.9.2006	247886 30.05.2011
A single aperture multimode tracking cum communication feed system	2295/CHE/2006 11.12.2006	230737 27.02.2009
A method of making composites with passive vibration damping effect	1434/CHE/2006 11.08.2006	254253 10.10.2012
Compact multimode tracking feed for satellite tracking	379/CHE/2007 23.02.2007	243174 28.09.2010
Four channel waveguide rotary joint for high power application	422/CHE/2007 01.03.2007	242223 19.08.2010
A dual channel rotary joint for spaceborne scanning antenna	567/CHE/2007 19.3.2007	248944 13.09.2011
High gain wideband planar microstrip antenna for space borne applications	2139/CHE/2007 21.09.2007	251970 18.04.2012
A method of providing two squinted beam feeds to a microwave sensor and a composite elliptical feed	2173/CHE/2007 26.09.2007	252111 26.4.2012
A segmented shaped multibeam reflector antenna	1874/CHE/2007 22.08.2007	251718 29.3.2012
A methd for simultaneously generating pencil beam and shaped beam from a single shaped reflector	1876/CHE/2007 22.08.07	257011 26.08.2013

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A vibration damping system for spacecraft mechanisms	317/CHE/2007 15.2.2007	243504 21.10.2010
Portable real time digital holographic system	679/CHE/2007 30.3.2007	247506 12.04.2011
An integrated system and a method for controlled drying / curing of chemicals such as propellants and explosives	802/CHE/2007 16.04.2007	244987 28.12.2010
A slow burn propellant composition with high performance characteristics	467/CHE/2007 07.03.2007	250645 16.01.2012
A method of producing an inhibition compound for solid propellant motors	678/CHE/2007 30.03.2007	243555 25.10.2010
A system and a method for calibration of signal processing electronics	763/CHE/2007 11.4.2007	251042 17.02.2012
GPS based programmable Search and Rescue Beacon	158/CHE/2008 18.01.2008	260245 15.04.2014
Manufacturing process to realize light weight inconel 718 panels for metallic thermal protection system	2983/CHE/2007 13.12.2007	253455 24.07.2012
Method of processing NiTi base shape memory alloys	2331/CHE/2008 24.09.2008	261445 25.06.2014

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