

## Patents Granted

### **1. AN IMPROVED ANTIGLARE DEVICE FOR AUTOMOBILE USEFUL DURING NIGHT DRIVING**

Country Granted: DE

Patent Number: 10196154 Date of Grant: 18/11/2010

Inventor(s): RAO P K, GUPTA S K, SINGH V, SHARMA SANJAY

### **2. A NEW MULTIFIBER 2D-ARRAY DEVICE FOR SENSING & LOCALIZING ENVIRONMENT PERTURBATIONS USING SPECKLE IMAGE PROCESSING**

Country Granted: EP

Patent Number: 1373837 Date of Grant: 20/10/2010

Inventor(s): SARDANA H K

### **3. IMPROVED FAKE CURRENCY DETECTOR USING VISUAL AND AUTOMATED INTEGRATED REFLECTIVE SPECTRAL RESPONSE**

Country Granted: US

Patent Number: 7684607 Date of Grant: 23/03/2010

Inventor(s): JOSHI, MURLI MANOHAR, SARDANA H K, BATRA SAROJ

### **4. DEVELOPMENT OF NEW CERAMIC MIXTURE FOR THERMAL / TEMPERATURE SENSOR WORKING ON THE PRINCIPLE OF NEGATIVE TEMPERATURE COEFFICIENT (NTC) AT 330 DEG. CENTIGRADE + OR - 6%**

Country Granted: KR

Patent Number: 10-0956988 Date of Grant: 05/03/2010

Inventor(s): B Raj

### **5. IMPROVED FAKE CURRENCY DETECTOR USING INTEGRATED TRANSMISSION AND REFLECTIVE SPECTRAL RESPONSE**

Country Granted: US

Patent Number: 7650027 Date of Grant: 19/01/2010

Inventor(s): JOSHI, MURLI MANOHAR, SARDANA H K, BATRA SAROJ

### **6. AN IMPROVED ANTIGLARE DEVICE FOR AUTOMOBILE USEFUL DURING NIGHT DRIVING**

Country Granted: CA

Patent Number: CA2377828 Date of Grant: 17/11/2009

Inventor(s): RAO P K, GUPTA S K, VIRENDER SINGH

### **7. A NEW PROCESS FOR CONTROLLED BLOOD TRANSFUSION WITH DISPOSABLE VALVE CIRCUIT**

Country Granted: KR

Patent Number: 10-0884023 Date of Grant: 02/10/2009

Inventor(s): VERMA SANJEEV, RAJ PIRTHI, CHATTOPADHYAY K D

### **8. Development of New ceramic mixture for thermal/temperature sensor working on the principle of negative temperature coefficient (NTC) at 330 degree**

Country Granted: CN

Patent Number: ZL03826216.9 Date of Grant: 16/09/2009

Inventor(s): B Raj

### **9. IMPROVED SEMI-AUTOMATIC PICK & PLACE MACHINE FOR ASSEMBLY COMPONENTS**

Country Granted: MY

Patent Number: MY-138858-A Date of Grant: 28/08/2009

Inventor(s): BHATNAGAR RANDHIR, R.R. SHRAVANA KUMAR, MENDIRATTA A K

### **10. A NEW PROCESS FOR LOWERING THE MARTENSITIC TRANSFORMATION TEMPERATURE (AS) IN THE CU-ZN-AL (6%AL) SHAPE MEMORY ALLOY FOR ITS UTILIZATION**

Country Granted: CN

Patent Number: ZL1823648.0 Date of Grant: 15/07/2009

Inventor(s): HARCHEKAR V R, SINGLA M L

### **11. AN IMPROVED MICRO-CONTROLLER BASED OSCILLATION MONITORING SYSTEM FOR THE SAFETY OF RAILWAY VEHICLES WITH HIGH STORAGE CAPACITY AND REAL TIME WARNING FACILITY**

Country Granted: ZA

Patent Number: 2007/05738 Date of Grant: 24/06/2009

Inventor(s): MITTAL S K

**12. FIBER OPTIC POINT TEMPERATURE SENSOR**

Country Granted: CN

Patent Number: ZL200380110920.9 Date of Grant: 27/05/2009

Inventor(s): JAIN SUBHASH C,MEHLA N S,PODDAR G C,TALWAR, RAJNEESH ,BANSAL ASHU KUMAR

**13. AN ENERGY EFFICIENT DATA ACQUISITION SYSTEM AND A COMPUTER CONTROLLED ON-LINE ENERGY MONITORING SYSTEM INCORPORATING THE SAME**

Country Granted: India

Patent Number: 233179 Date of Grant: 27/03/2009

Inventor(s): CHANDER MEENALOCHANI ,KRISHNAMOORTHY D ,AYYAPPAN G S,Rao R K Mohan

**14. A BLOOD TRANSFUSION TRANSFUSION SYSTEM**

Country Granted: India

Patent Number: 232577 Date of Grant: 18/03/2009

Inventor(s): CHATTOPADHYAY K D,VERMA SANJEEV ,RAJ PIRTHI

**15. DEVELOPMENT OF NEW CERAMIC MIXTURE FOR THERMAL / TEMPERATURE SENSOR WORKING ON THE PRINCIPLE OF NEGATIVE TEMPERATURE COEFFICIENT (NTC) AT 330 DEG. CENTIGRADE + OR - 6%**

Country Granted: JP

Patent Number: 4276180 Date of Grant: 13/03/2009

Inventor(s): B Raj

**16. FIBER OPTIC TEMPERATURE SWITCHING IMMERSION PROBE**

Country Granted: KR

Patent Number: 885756 Date of Grant: 19/02/2009

Inventor(s): MEHLA N S,JAIN SUBHASH C

**17. CU-ZN-AL(6%) ALLOY WITH LOW MARTENSITIC TEMPERATURE AND ITS PROCESS**

Country Granted: India

Patent Number: 229248 Date of Grant: 16/02/2009

Inventor(s): HARCHEKAR V R,SINGLA M L

**18. A CERAMIC MIXTURE HAVING NEGATIVE TEMPERATURE CO-EFFICIENT, A THERMISTOR CONTAINING THE CERAMIC MIXTURE AND A PROCESS FOR PREPARING THEREOF**

Country Granted: India

Patent Number: 227829 Date of Grant: 20/01/2009

Inventor(s): Baldev Raj

**19. A NEW PROCESS FOR CONTROLLED BLOOD TRANSFUSION WITH DISPOSABLE VALVE CIRCUIT**

Country Granted: CN

Patent Number: ZL02828883.1 Date of Grant: 04/01/2009

Inventor(s): CHATTOPADHYAY K D,VERMA SANJEEV ,RAJ PIRTHI

**20. FIBER OPTIC POINT TEMPERATURE SENSOR**

Country Granted: India

Patent Number: 225944 Date of Grant: 04/12/2008

Inventor(s): JAIN SUBHASH C,MEHLA N S,PODDAR G C,TALWAR, RAJNEESH ,BANSAL ASHU KUMAR

**21. A NEW MULTIFIBER 2D-ARRAY DEVICE FOR SENSING & LOCALIZING ENVIRONMENT PERTURBATIONS USING SPECKLE IMAGE PROCESSING**

Country Granted: KR

Patent Number: 10-0869517 Date of Grant: 13/11/2008

Inventor(s): SARDANA H K

**22. SYNTHESIS OF PLATINUM AND PALLADIUM QUANTUM WELL SIZE NANO-PARTICLES**

Country Granted: KR

Patent Number: 10-0860610 Date of Grant: 22/09/2008

Inventor(s): Jain Dharam Veer ,KISHORE RAM

**23. PORTABLE SYSTEM FOR TOTAL GOSSYPOL MEASUREMENT**

Country Granted: India

Patent Number: 223607 Date of Grant: 17/09/2008

Inventor(s): MAHAPATRA P K

**24. DATA ACQUISITION SYSTEM USEFUL FOR INCORPORATION IN A COMPUTER CONTROLLED ON-LINE ENERGY MONITORING SYSTEM AND A COMPUTER CONTROLLED ON-LINE ENERGY MONITORING SYSTEM INCORPORATING THE DATA ACQUISITION SYSTEM**

Country Granted: AU

Patent Number: 2002348737 Date of Grant: 31/07/2008

Inventor(s): Rao R K Mohan, CHANDER MEENALOCHANI, KRISHNAMOORTHY D, AYYAPPAN G S

**25. IMPROVED SEMIAUTOMATIC PICK AND PLACE MACHINE FOR ASSEMBLY OF COMPONENTS**

Country Granted: India

Patent Number: 221759 Date of Grant: 03/07/2008

Inventor(s): BHATNAGAR RANDHIR, R.R. SHRAVANA KUMAR, Ramarao Rayagond, MENDIRATTA A K

**26. AN OPTO-ELECTRONIC DEVICE FOR ANGLE GENERATION OF ULTRASONIC PROBE**

Country Granted: AU

Patent Number: 2003290413 Date of Grant: 29/05/2008

Inventor(s): AHLUWALIA S S

**27. AN IMPROVED ANTIGLARE OPTICAL DEVICE**

Country Granted: India

Patent Number: 220363 Date of Grant: 27/05/2008

Inventor(s): RAO P K, GUPTA S K, VIRENDER SINGH, SHARMA SANJAY

**28. A NEW PROCESS FOR LOWERING THE MARTENSITIC TRANSFORMATION TEMPERATURE (AS) IN THE CU-ZN-AL (6%AL) SHAPE MEMORY ALLOY FOR ITS UTILIZATION**

Country Granted: JP

Patent Number: 4101758 Date of Grant: 28/03/2008

Inventor(s): HARCHEKAR V R, SINGLA M L

**29. AN IMPROVED PROCESS USEFUL FOR DETECTION AND DETERMINATION OF GASES PRESENT IN A GAS STREAM**

Country Granted: India

Patent Number: 214937 Date of Grant: 18/02/2008

Inventor(s): Natarajan, Thoppur Rajagopal, K SUNDARARAJAN

**30. IMPROVED SEMI-AUTOMATIC PICK & PLACE MACHINE FOR ASSEMBLY COMPONENTS**

Country Granted: AU

Patent Number: 2002212673 Date of Grant: 07/02/2008

Inventor(s): BHATNAGAR RANDHIR, R.R. SHRAVANA KUMAR, MENDIRATTA A K

**31. AN IMPROVED ANTIGLARE DEVICE FOR AUTOMOBILE USEFUL DURING NIGHT DRIVING**

Country Granted: KR

Patent Number: 10-0748153 Date of Grant: 03/08/2007

Inventor(s): RAO P K, GUPTA S K, SINGH V, SHARMA S

**32. A NEW PROCESS FOR LOWERING THE MARTENSITIC TRANSFORMATION TEMPERATURE (AS) IN THE CU-ZN-AL (6%AL) SHAPE MEMORY ALLOY FOR ITS UTILIZATION**

Country Granted: DE

Patent Number: DE60123296T2 Date of Grant: 06/06/2007

Inventor(s): HARCHEKAR V R, SINGLA M L

**33. FIBER OPTIC TEMPERATURE SWITCHING IMMERSION PROBE**

Country Granted: EP

Patent Number: 1490661 Date of Grant: 09/05/2007

Inventor(s): MEHLA N S, JAIN SUBHASH C

**34. A NEW PROCESS FOR LOWERING THE MARTENSITIC TRANSFORMATION TEMPERATURE (AS) IN THE CU-ZN-AL (6%AL) SHAPE MEMORY ALLOY FOR ITS UTILIZATION**

Country Granted: US

Patent Number: 7195681 Date of Grant: 27/03/2007

Inventor(s): HARCHEKAR V R, SINGLA M L

**35. IMPROVED SEMI-AUTOMATIC PICK & PLACE MACHINE FOR ASSEMBLY COMPONENTS**

Country Granted: CN

Patent Number: ZL01816246.0 Date of Grant: 21/03/2007

Inventor(s): BHATNAGAR RANDHIR ,R.R. SHRAVANA KUMAR,MENDIRATTA A K

**36. Energy efficient data acquisition system and a computer controlled on-line energy monitoring system incorporating the same**

Country Granted: US

Patent Number: 7142994 Date of Grant: 28/11/2006

Inventor(s): SELVAM P CHENTHAMARAI,CHANDER MEENALOCHANI ,KRISHNAMOORTHY D ,AYYAPPAN G S

**37. Multi-fiber optic 2D-array device for sensing and localizing environment perturbation using speckle image processing**

Country Granted: IL

Patent Number: 158177 Date of Grant: 02/11/2006

Inventor(s): SARDANA H K

**38. A SYSTEM AND METHOD FOR MONITORING PROPERTIES OF A MEDIUM BY FIBER OPTICS**

Country Granted: US

Patent Number: 7130061 Date of Grant: 31/10/2006

Inventor(s): MEHLA N S,JAIN SUBHASH C

**39. A DEVICE USEFUL FOR THE DETERMINATION OF THE DEGREE OF INSATURATION IN OILS IN TERM OF IODINE METER**

Country Granted: India

Patent Number: 199695 Date of Grant: 06/10/2006

Inventor(s): SINGLA M L,CHAND GIAN

**40. A NEW PROCESS FOR LOWERING THE MARTENSITIC TRANSFORMATION TEMPERATURE (AS) IN THE CU-ZN-AL (6%AL) SHAPE MEMORY ALLOY FOR ITS UTILIZATION**

Country Granted: EP

Patent Number: 1436437 Date of Grant: 20/09/2006

Inventor(s): HARCHEKAR V R,SINGLA M L

**41. AN IMPROVED ANTIGLARE DEVICE FOR AUTOMOBILE USEFUL DURING NIGHT DRIVING**

Country Granted: CN

Patent Number: ZL01801786.X Date of Grant: 13/09/2006

Inventor(s): RAO P K,GUPTA S K,SHARMA SANJAY ,SINGH V

**42. AN IMPROVED LATHE TOOL POST**

Country Granted: India

Patent Number: 196879 Date of Grant: 11/08/2006

Inventor(s): RATTAN K S

**43. A NEW PROCESS FOR CONTROLLED BLOOD TRANSFUSION WITH DISPOSABLE VALVE CIRCUIT**

Country Granted: US

Patent Number: 7083587 Date of Grant: 01/08/2006

Inventor(s): CHATTOPADHYAY K D,VERMA SANJEEV ,RAJ PIRTHI

**44. IMPROVED SEMIAUTOMATIC PICK & PLACE MACHINE FOR ASSEMBLY COMPONENTS**

Country Granted: ZA

Patent Number: 2003/2234 Date of Grant: 30/06/2006

Inventor(s): BHATNAGAR RANDHIR ,R.R. SHRAVANA KUMAR,MENDIRATTA A K

**45. A DEVICE USEFUL FOR CONTROLLED DRUG INFUSION**

Country Granted: India

Patent Number: 196929 Date of Grant: 23/06/2006

Inventor(s): GUPTA R C,VERMA SANJEEV

**46. Development of New ceramic mixture for thermal/temperature sensor working on the principle of negative temperature coefficient (NTC) at 330 degree**

Country Granted: EP

Patent Number: 1597738 Date of Grant: 17/05/2006

Inventor(s): RAJ BALDEV ,SINGLA M L,HARCHEKAR V R,BAJPAI R P

**47. DEVELOPMENT OF NEW CERAMIC MIXTURE FOR THERMAL / TEMPERATURE SENSOR WORKING ON THE PRINCIPLE OF NEGATIVE TEMPERATURE COEFFICIENT (NTC) AT 330 DEG. CENTIGRADE + OR - 6%**

Country Granted: EP

Patent Number: 1597738 Date of Grant: 17/05/2006

Inventor(s): B Raj

**48. Cu-ZN-A1(6%) shape memory alloy with low martensitic temperature and a process for its manufacture**

Country Granted: US

Patent Number: 6977017 Date of Grant: 20/12/2005

Inventor(s): HARCHEKAR V R,SINGLA M L

**49. Device useful for signal transfer from static surface to rotating surface and viceversa**

Country Granted: US

Patent Number: 6950003 Date of Grant: 27/09/2005

Inventor(s): AHLUWALIA S S,VERMA SANJEEV

**50. Opto-electronic device for angle generation of ultrasonic probe**

Country Granted: US

Patent Number: 6946648 Date of Grant: 20/09/2005

Inventor(s): AHLUWALIA S S

**51. FIBER OPTIC TEMPERATURE SWITCHING IMMERSION PROBE**

Country Granted: SG

Patent Number: 106860 Date of Grant: 31/05/2005

Inventor(s): MEHLA N S,JAIN SUBHASH C

**52. A NEW MULTIFIBER 2D-ARRAY DEVICE FOR SENSING & LOCALIZING ENVIRONMENT PERTURBATIONS USING SPECKLE IMAGE PROCESSING**

Country Granted: CN

Patent Number: ZL01823210.8 Date of Grant: 14/05/2005

Inventor(s): SARDANA H K

**53. A CERAMIC MIXTURE HAVING NEGATIVE TEMPERATURE COEFFICIENT, A THERMISTOR CONTAINING THE CERAMIC MIXTURE AND THE PROCESS FOR PREPARING THEREOF**

Country Granted: US

Patent Number: 6878311 Date of Grant: 12/04/2005

Inventor(s): LAL MADAN , Baldev Raj

**54. FIBER OPTIC POINT TEMPERATURE SENSOR**

Country Granted: US

Patent Number: 6856714 Date of Grant: 15/02/2005

Inventor(s): JAIN SUBHASH C,MEHLA N S,PODDAR G C,TALWAR, RAJNEESH ,BANSAL ASHU KUMAR

**55. AN IMPROVED ANTIGLARE DEVICE FOR AUTOMOBILE USEFUL DURING NIGHT DRIVING**

Country Granted: AU

Patent Number: 774644 Date of Grant: 14/10/2004

Inventor(s): RAO P K,GUPTA S K,SINGH V ,SHARMA S

**56. FIBER OPTIC TEMPERATURE SWITCHING IMMERSION PROBE**

Country Granted: US

Patent Number: 6726360 Date of Grant: 27/04/2004

Inventor(s): MEHLA N S,JAIN SUBHASH C

**57. AN IMPROVED ANTIGLARE DEVICE FOR AUTOMOBILE USEFUL DURING NIGHT DRIVING**

Country Granted: US

Patent Number: 6674587 Date of Grant: 13/01/2004

Inventor(s): RAO P K,GUPTA S K,SINGH V ,SHARMA SANJAY

**58. Multi-fiber optic 2D-array device for sensing and localizing environment perturbation using speckle image processing**

Country Granted: US

Patent Number: 6590194 Date of Grant: 08/07/2003

Inventor(s): SARDANA H K

**59. A SENSOR FOR DETECTING AND MONITORING CHLORIDE PRESENT IN A SOLID SAMPLE AND A DEVICE INCORPORATING THE SENSOR**

Country Granted: India

Patent Number: 187005 Date of Grant: 08/09/2002

Inventor(s): NARAYNAN U H , K SUNDARARAJAN ,REDDY V K ,DHANDAVEL R ,SAMPATHKUMAR R

**60. AN IMPROVED COLLIMATOR**

Country Granted: India

Patent Number: 186384 Date of Grant: 22/03/2002

Inventor(s): KARKERA B N

**61. AN IMPROVED DEVICE USEFUL FOR PRECISE CONTROL OF GAP BETWEEN TIP AND SAMPLE IN A SCANNING TUNNELING MICROSCOPE**

Country Granted: India

Patent Number: 186555 Date of Grant: 05/03/2002

Inventor(s): KAUL A D

**62. A PORTABLE DIGITAL SOIL SALINITY TESTER**

Country Granted: India

Patent Number: 181263 Date of Grant: 05/07/1999

Inventor(s): PYNE S K ,GOWARIKER S R

**63. INSITU SOIL PH METER WITH METALLIC SENSOR**

Country Granted: India

Patent Number: 174937 Date of Grant: 10/06/1995

Inventor(s): GOWARIKER S R

**64. AN IMPROVED BLOOD ANALYSIS EQUIPMENT**

Country Granted: India

Patent Number: 170764 Date of Grant: 09/03/1993

Inventor(s): SAIKIA DC ,DUTTA D K ,GHOSH S K ,MAHANTA D ,BORA U C

**65. LOW VOLTAGE ROOM ELECTROSTATIC PRECIPITATOR**

Country Granted: India

Patent Number: 163625 Date of Grant: 06/09/1989

Inventor(s): V S Bhatnagar, H Singh

**66. IMPROVED THREE WAY SOLENOID VALVE DEVICE FOR FLUID CONTROL MANAGEMENT**

Country Granted: India

Patent Number: 153058 Date of Grant: 23/02/1985

Inventor(s): KHANDPUR R S

**67. IMPROVEMENTS IN OR RELATING TO BREATH ALCOHOL ANALYSERS FOR DETECTING ALCOHOL IN BREATH**

Country Granted: India

Patent Number: 143731 Date of Grant: 09/07/1979

Inventor(s): VARDHAN H ,KHANDPUR R S