

## **Dr. Ranjan Sen**

### **Patents Filed**

1. An improved method for fabricating rare earth (RE) doped optical fibre using a codopant, R Sen, A Dhar, M C Paul, H S Maiti, PCT/IN2010/000201, dtd 29.03.2010.
2. An improved method for fabricating rare earth (RE) doped optical fibre using a codopant, R Sen, A Dhar, M C Paul, H S Maiti, 609/DEL/09 dtd 27.03.2009, INDIA.
3. A process of making rare earth doped optical fibre, R Sen, M Chatterjee, M K Naskar, M Pal, M C Paul, S K Bhadra, K Dasgupta, D Ganguli, T Bandopadhyay, A Gedanken, NF-432/01, dtd 27.09.2004, CANADA.
4. A process of making rare earth doped optical fibre, R Sen, M Chatterjee, M K Naskar, M Pal, M C Paul, S K Bhadra, K Dasgupta, D Ganguli, T Bandopadhyay, A Gedanken, ZL01823802.5, dtd 18.05.2004, CHINA.
5. A process of making rare earth doped optical fibre, R Sen, M Chatterjee, M K Naskar, M Pal, M C Paul, S K Bhadra, K Dasgupta, D Ganguli, T Bandopadhyay, A Gedanken, 2004/3772, dtd 17.05.2004, S. AFRICA.
6. A process of making rare earth doped optical fibre, R Sen, M Chatterjee, M K Naskar, M Pal, M C Paul, S K Bhadra, K Dasgupta, D Ganguli, T Bandopadhyay, A Gedanken, 4141956 dtd. 19.04.2004, JAPAN
7. A process of making rare earth doped optical fibre, R Sen, M Chatterjee, M K Naskar, M Pal, M C Paul, S K Bhadra, K Dasgupta, D Ganguli, T Bandopadhyay, A Gedanken, 10-0816010, dtd 17.04.2004, KOREA.
8. A process for making rare earth doped optical fibre, T. Bandopadhyay, R Sen, S K Bhadra, K Dasgupta, M C Paul, 223566, dtd 31.03.2003, INDIA.
9. A process for making rare earth doped optical fibre, T. Bandopadhyay, R Sen, S K Bhadra, K Dasgupta, M C Paul, 2436579, dtd 01.08.2003, CANADA.
10. A process for making rare earth doped optical fibre, T. Bandopadhyay, R Sen, S K Bhadra, K Dasgupta, M C Paul, 2003/5990, dtd 04.08.2003, S.AFRICA.
11. Process for making rare earth doped optical fibre, T. Bandopadhyay, R Sen, S K Bhadra, K Dasgupta, M C Paul, 200124272, dtd 05.08.2003, AUSTRALIA.
12. Process for making rare earth doped optical fibre, T. Bandopadhyay, R Sen, S K Bhadra, K Dasgupta, M C Paul, GB2388367, dtd 06.08.2003, UK.

13. Process for making rare earth doped optical fibre, T. Bandopadhyay, R Sen, S K Bhadra, K Dasgupta, M C Paul, ZL01823008.3 dtd 09.09.2003, CHINA.
14. Process for making rare earth doped optical fibre, T. Bandopadhyay, R Sen, S K Bhadra, K Dasgupta, M C Paul, 10-0655480, dtd 02.08.2003, KOREA.
15. . A process of making rare earth doped optical fibre, R Sen, M Chatterjee, M K Naskar, M Pal, M C Paul, S K Bhadra, K Dasgupta, D Ganguli, T Bandopadhyay, A Gedanken, 1839/DEL/03, dtd 06.11.2003.
16. A method of fabricating rare earth doped optical fibre, R Sen, M Pal, M C Paul, S K Bhadra, S Chatterjee, K Dasgupta, 2002249558, dtd 28.03.2002, AUSTRALIA.
17. Method of fabricating rare earth doped optical fibre, R Sen, M Pal, M C Paul, S K Bhadra, S Chatterjee, K Dasgupta, 6851281, dtd 27.03.2002, USA.
18. A process of making rare earth doped optical fibre, R Sen, M Chatterjee, M K Naskar, M Pal, M C Paul, S K Bhadra, K Dasgupta, D Ganguli, T Bandopadhyay, A Gedanken, 1487751, dtd 28.03.2002, E. UNION.
19. A process of making rare earth doped optical fibre, R Sen, M Chatterjee, M K Naskar, M Pal, M C Paul, S K Bhadra, K Dasgupta, D Ganguli, T Bandopadhyay, A Gedanken, PCT/IN02/00089 dtd 28.03.2002.
20. A process for making rare earth doped optical fibre, T. Bandopadhyay, R Sen, S K Bhadra, K Dasgupta, M C Paul, PCT/IN01/00014, dtd 02.02/2001
21. A process for making rare earth doped optical fibre, T. Bandopadhyay, R Sen, S K Bhadra, K Dasgupta, M C Paul, 6751990 dtd 07.03.2001, USA.
22. A process of making rare earth doped optical fibre, R Sen, M Chatterjee, M K Naskar, M Pal, M C Paul, S K Bhadra, K Dasgupta, D Ganguli, T Bandopadhyay, A Gedanken, 6889528, dtd 22.10.2001, USA.
23. An equipment for the manufacture of thin multifilament fused quartz fibre strand sand a process thereof, S K Bhadra, S Chakrabarti, T K Bandopadhyay, K K Phani, N R Bose, K Dasgupta, R Sen, M C Paul, M Pal, T K Gangopadhyay, P P Giri, 231611, dtd 19.03.2001, INDIA.