

AI & HEALTHCARE DRIVE INDIA'S DEEPTech INNOVATION: 922 PATENTS FILED SINCE 2008

India's thriving startup ecosystem and rapid technological progress have led to a significant increase in patent filings. According to Nasscom's latest report, around 82.8 thousand patents were filed in India during FY23, marking an impressive 24.7% year-on-year (YoY) growth. However, it's crucial to recognize that not all filed patents are granted. Only 41.2%, approximately 34.1 thousand patents, were approved during this period.

This disparity between patent filings and grants highlights the stringent evaluation process that ensures only genuinely innovative inventions receive protection. The number of patents granted in India rose by 13.3% YoY in the last fiscal year.

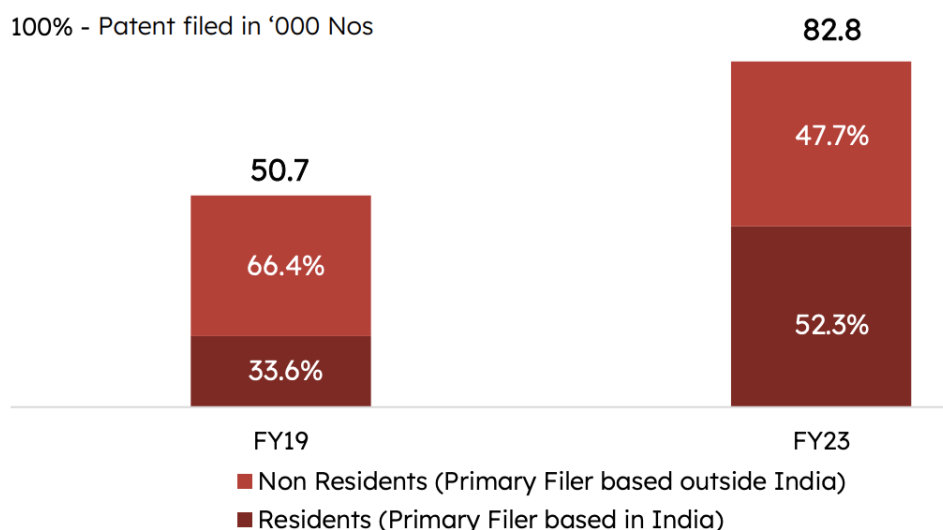
For those unfamiliar, patents are filed by companies or individuals to protect their innovations and inventions from unauthorized use or duplication. A patent gives the inventor or assignee exclusive rights to profit from their creation for a set period.

Rise of Indian Resident Patent Filers

A notable trend in India is the increasing dominance of Indian resident filers, surpassing non-resident filers. In FY23, Indian resident filers made up 52.3% of total patent applications, a significant rise from 33.6% in FY19. This surge reflects the country's growing innovation potential.

Share of Patents Filed in India by Type

100% - Patent filed in '000 Nos



Educational institutions are increasingly focusing on creating intellectual property (IP), contributing to the rise in Indian resident filers. In FY23, these institutions accounted for 23% of total patents filed in India, a substantial increase from 11% in FY22.

Particularly remarkable is the tripling of patents from educational institutes, which jumped from 7.4 thousand in FY22 to 19.2 thousand in FY23.

Examples like the IP portfolios of leading institutions such as IISC and IIT Madras illustrate this trend. As of March 31, 2024, IISC had filed over 1000 IPs, including trademark and copyright applications, with more than 600 already granted.

Similarly, IIT Madras had filed over 2700 IPs by FY23, with more than 1300 granted or registered. These figures highlight the significant role of educational institutions in driving technological innovation and creating a culture of creativity in India.

Patents Filed by Deep Tech Startups

The Nasscom report also reveals that Indian startups are increasingly focusing on innovation, with major DeepTech ventures filing 922 patents since 2008. Interestingly, the USA is the primary source of patents for these companies.

Of the 922 DeepTech patents filed between 2008 and 2023, 676 were initially filed in India, but only 35% were granted, compared to a 53% grant rate in the USA for 190 patents. This difference can be attributed to several factors that give the USA an edge in patenting.

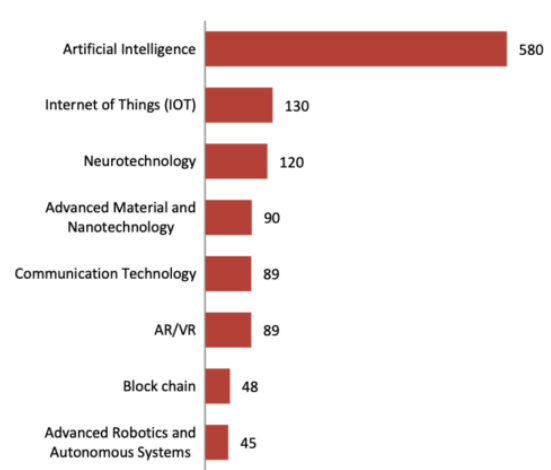
One key factor is the significantly shorter average patent grant time in the USA, which is roughly twice as fast as in India. Additionally, investors in the USA place greater importance on patents when evaluating funding opportunities, giving startups in that ecosystem a distinct advantage. Moreover, the USA's advanced infrastructure for researching and developing new DeepTech technologies makes it a prime market for innovative breakthroughs.

Within India, the Chennai patent office stands out, accounting for nearly 70% of all India-origin filings by DeepTech startups, followed by Mumbai with 22%. These startups mainly focus on AI and healthcare innovations.

Patent Filings by Top Application Areas



Patent Filings by Top Technology Areas



Overall, Tamil Nadu leads in patent filing, thanks to its favorable ecosystem and supportive policies. In FY23, Tamil Nadu ranked first with a 9.3% share of total patent filings, surpassing Maharashtra's 6.8%. Several factors have contributed to this growth.

On a global level, intellectual property creation is gaining momentum. By the end of CY 2022, patent filings reached 3.46 million, up from 3.4 million in CY 2021. Although India's share in this global landscape remains small, its growth from 1.8% to 2.2% is a positive sign.

By nurturing creativity, supporting entrepreneurship, and strengthening intellectual property laws, India is well-positioned to improve its global standing in intellectual property creation.