Report on Expert Talk on Patents for Engineers

An expert talk has been organized by Intellectual Property Right Cell on "Patents for Engineers" for the 3rd year students on 3rd November, 2025 from 11:00am to 12:00pm in Seminar Hall # 406. Dr. Deepti Deshwal, Convener IPR Cell. The speaker **Dr. Intiram Raza Khan** from **Jamia Hamdard**, focused on the dynamic relationship between **Artificial Intelligence** (**AI**) and **Intellectual Property Rights (IPR)**. The session shed light on how AI is transforming intellectual property systems by automating searches, enhancing accuracy in filings, and streamlining portfolio management. Dr. Khan began by explaining the different categories of IPR, including patents, trademarks, copyrights, designs, and geographical indications. Each of these forms of protection serves a crucial role in safeguarding creativity and innovation. He emphasized that IPR not only provides legal protection and exclusive rights but also encourages commercialization and prevents unauthorized exploitation of intellectual creations.

The presentation outlined the general steps in the IPR filing process: conducting prior art searches, preparing the application, filing with the relevant authority, examination, and eventual registration or grant. However, Dr. Khan noted that filing for intellectual property is not without challenges. It can be complex and costly, often involving jurisdictional issues when seeking protection in multiple countries. Furthermore, applicants must ensure their innovations are novel and non-obvious to qualify for protection. Despite these challenges, the benefits of a strong IPR framework are immense, providing creators and businesses with the confidence to innovate without fear of infringement.

A key highlight of the event was the discussion on **AI applications in IPR**. Dr. Khan illustrated how AI-powered tools are revolutionizing traditional IP processes. For instance, AI can efficiently conduct patent searches, analyze prior art, assist in trademark clearance, detect copyright infringements, and even support litigation through automated document review. These capabilities increase efficiency, accuracy, and cost-effectiveness while freeing human experts to focus on strategic decision-making. He also touched upon **AI's role in IP portfolio management**, enabling real-time monitoring of deadlines, competitor activity, and licensing opportunities.

Another important aspect covered was the **integration of blockchain technology** in IPR management, particularly under India's **National Blockchain Framework** (2024). Blockchain enables immutable records of inventions, proof of authorship, and automated licensing through smart contracts. It also enhances transparency and cross-border IP protection by creating interoperable global systems. Dr. Khan highlighted that this integration positions India as a leader in digital IP governance and strengthens the credibility of IP systems.

To illustrate the impact of effective IPR implementation, Dr. Khan presented Indian case studies. **Darjeeling Tea**, the first Indian product to receive a Geographical Indication (GI) tag in 2004, preserves cultural heritage and ensures authenticity, while **Tata Swach Water Purifier**, protected by patents, showcases frugal innovation addressing public health challenges in rural India. The

session also explored patent design opportunities in human resource management and marketing, where AI-driven tools can optimize recruitment, employee engagement, customer targeting, and marketing analytics.

Finally, Dr. Khan discussed the role of **patent agents** in India—professionals qualified to draft, file, and prosecute patents under the **Indian Patents Act, 1970**. He outlined the eligibility requirements, career prospects, and their importance in guiding innovators through complex legal procedures. Concluding the event, Dr. Khan emphasized that the fusion of AI and IPR marks a transformative phase in innovation management. As India adopts advanced technologies and legal reforms, it moves closer to becoming a global leader in protecting and promoting creative and technological advancements.



