



## INTELLECTUAL PROPERTY GROUP

### Mission

The Intellectual Property Group at NCL is a service group that aims to help scientists and students strategize, protect, secure, valorize and extract value from intellectual property emerging out of their work while also championing the cause of inventions, inventors and the spirit of invention within NCL.

NCL has been one of the largest patent filing organizations in India. NCL has contributed enormously to the awareness and popularization of patents in the country over the last two decades. The Intellectual Property Group at NCL has played a central role in making that possible.

### Scope of activities

- Patent administration: Receiving house for disclosures, patentability assessment, drafting, preparation of forms, prosecution support, correspondences with IPMD.
- Records, databases, business process automation: Records, databases, tracking sheets, generation of reports and business process automation.
- Research support: Reports for planning IP and research projects such as patent landscapes, freedom-to-practice, infringement assessment, prior-art reports.
- Portfolio and investment management: Decisions - Should we file? Portfolio planning & focus. Where should we file? How much will it cost? Maintenance decisions.
- Policy, strategy and institutional mechanisms: IP policy, strategic framework for the organization
- Awareness, training and promotion: Awareness and education campaigns, workshops, lectures, etc, prizes and recognitions.
- Marketing, valuation and licensing: Publicity and active marketing, negotiations, valuation and pricing, licensing agreements)
- Material transfer agreements: Receiving house for in-bound and out-bound requests, IP-related approval, signing authority.

### Current patent portfolio

Traditionally, NCL's patent portfolio has emphasized the chemical sector. Recent years have seen NCL adding patents in the materials, energy and biotechnology sectors to this patent portfolio.

- Chemicals sector
  - Petrochemicals
  - Bio-active molecules, drugs, pharma intermediates
  - Catalytic materials
  - Fine chemicals

- Materials sector
  - Polymers in specialty applications
  - Polymerization and polymerization catalysis
  - Nanomaterials
  - Controlled release
  - Membranes, separations
  - Polymer additives, compounds, blends, composites
- Biotechnology and agriculture sector
  - Industrial biotechnology and enzymology
  - Agrobiotechnology, agrochemicals
  - Biocontrol, biopesticides
- Other sectors:
  - Environment, sustainability
  - Energy, petroleum
  - Surfactants
  - Software and embedded algorithms

### Recent trends in new invention disclosures

NCL's recent efforts in interdisciplinary, integrated and often mission-mode programs are yielding valuable invention disclosures in frontier areas.

- Value addition of bioresources; Renewable polymers
- Controlled delivery of active agents using polymeric materials
- Nano-structured and micro-structured materials
- Other specialty applications of polymers (membranes, enzyme immobilization etc)
- New organic and bio-organic molecules as potential drugs, antifungal agents etc
- Alternative energy
- Agro-biotechnology

### Areas of patent licensing successes (Last 10 years)

NCL has one of the strongest records of patent licensing in India. The Intellectual Property Group actively contributes to this process via patent portfolio management, patent marketing and licensing. The following are broad areas where NCL has been successful in patent licensing in the last decade.

- Polymer manufacturing
- Fine chemicals
- Membranes
- Agrochemicals
- Pharmaceuticals
- Lubricants
- Bioresource value addition
- Signal processing and process control

**Contact : Head, Intellectual Property Group**

Email: head.ip@ncl.res.in