# INTELLECTUAL PROPERTY (IP) & PATENT MANAGEMENT SYSTEM

#### **Problem Statement**

Intellectual Property (IP) is one of the most valuable assets for organizations today. Companies, startups, and independent inventors often face challenges in tracking multiple patents, managing renewals, and responding to legal notices.

- Missed deadlines or a lack of visibility can result in financial losses, legal disputes, or permanent loss of patent rights.
- The absence of a unified management system creates inefficiencies, where inventors rely on manual trackers and legal teams manage fragmented records.

Therefore, there is a strong need for a **centralized**, **intelligent platform** to manage the complete lifecycle of patents and intellectual property assets.

# **Requirement Gathering**

Requirement gathering involves understanding the needs of all stakeholders:

- **Inventors:** Intuitive interface to file, track, and update patents.
- Legal Teams: Tools for managing legal notices, disputes, and compliance.
- IP Managers: Dashboards for visibility into upcoming renewals and portfolio health.
- Executives: Strategic insights into the organization's IP portfolio for decision-making.

#### Key requirements:

- 1. Centralized storage of patent, inventor, and filing data
- 2. Automated renewal reminders & filing notifications
- 3. Integration with government APIs for patent validation
- 4. AI-based conflict detection & similarity analysis
- 5. Real-time dashboards and reports

### **Stakeholder Analysis**

- Primary Stakeholders: Inventors, Legal Teams, IP Managers
- Secondary Stakeholders: Compliance Officers, R&D Teams, Executives
- External Stakeholders: Government Patent Offices, Regulatory Bodies, Law Firms

Each stakeholder has unique objectives. For example:

- Inventors prioritize usability
- Legal teams emphasize compliance
- Executives focus on portfolio value and insights

## **Business Mapping**

The **patent lifecycle** can be mapped into the following phases:

- 1. **Patent Filing** → Record details of new patents, inventors, and filing information.
- 2. **Examination**  $\rightarrow$  Track government responses, reviews, and office actions.
- 3. Grant  $\rightarrow$  Successful approval and issuance of the patent.
- 4. **Renewal** → Scheduled payments and renewals to keep patents active.
- 5. **Expiry/Invalidation**  $\rightarrow$  Closure of a patent due to expiration or legal disputes.

At each stage, Salesforce features (Flows, Triggers, LWCs, Dashboards) can automate tasks, improve transparency, and reduce errors.

## **Industry-Specific Use Case Analysis**

The IP industry is **highly regulated and competitive**. Challenges include:

- Cross-border patent management
- Different renewal regulations per country
- Monitoring competitor filings

Salesforce can address these by:

- Centralizing patent data across geographies
- Automating reminders for jurisdiction-specific rules
- Using Einstein Analytics for predicting renewal risks
- Implementing NLP-based similarity checks for conflict detection

# **AppExchange Exploration**

AppExchange has ready-to-use solutions that can speed up development:

- **DocuSign for Salesforce** → e-signatures for filings & renewals
- Conga Composer → generate legal notices & summaries
- Case Management Apps → handle infringement cases & disputes

Exploring these ensures we **reuse components**, reduce effort, and align with best practices.