Abstract

A computer-implemented platform, **LexFusion Ai**, automates the entire patent lifecycle, from invention disclosure through post-grant enforcement, within a single, data-linked architecture (see **FIG. 1A**). An Application-Creation module ingests inventor input and, using AI language models and jurisdiction-specific templates, generates a draft specification, claims and synchronized drawings. A Prosecution Automation module securely retrieves patent-office communications, parses rejections, drafts compliant responses, assembles requisite forms, computes statutory deadlines and submits filings electronically. Upon grant, an Enforcement Docketing module continuously monitors public data streams, applies machine-learning claim-matching to detect potential infringement, auto-generates evidence-of-use charts and docketed licensing or litigation workflows. A Figure-Drafting/Synchronization module employs AI to propose drawings and inject reference numerals into the specification, ensuring consistency. All modules share a central repository and are presented through a unified user interface, providing practitioners a seamless, audit-logged workflow that reduces drafting time, mitigates prosecution risk and enables proactive, scalable patent enforcement.