

Mapping Expired Patents to Mitigate Litigation Risk Before Product Launch

IIPRD • IP Asset Management | Patent Research & Analytics

OBJECTIVE

To assess **Freedom to Operate (FTO)** for a client preparing to launch a new hardware product with multiple functional modules that overlapped with known historical technologies. The engagement required granular legal-status verification across jurisdictions to confirm that all potentially blocking patents were fully expired — with no active continuations, reissued patents, or live family members capable of creating future litigation exposure.

CHALLENGE

- ▶ Initial review identified several patents whose claim language overlapped with the client's product features — creating apparent FTO risk before legal-status verification was complete.
- ▶ Even though the underlying concepts appeared old, the client was concerned about patent assertion entities (PAEs) acquiring expired or lapsed portfolios and asserting reissued or continuation claims.
- ▶ Many patents had complex legal status histories requiring granular review:
 - Continuation and continuation-in-part (CIP) filings extending effective claim scope
 - Maintenance fee lapse and reinstatement records across multiple jurisdictions
 - Terminal disclaimer filings affecting co-pending family members
 - Jurisdictional variations in expiry dates due to patent term adjustments (PTAs)
- ▶ A surface-level expiry review was insufficient — each patent family required end-to-end prosecution history and maintenance record analysis to confirm that no enforceable rights remained.

APPROACH — FAMILY-LEVEL LEGAL STATUS REVIEW & PRODUCT ARCHITECTURE MAPPING

1 Granular Family-Level Review

Conducted a jurisdiction-by-jurisdiction family-level review of all identified patents, determining expiry dates, lapsed and abandoned status, continuation and CIP filings, terminal disclaimers, maintenance fee payment records, and patent term adjustment histories.

2 Product Architecture Mapping

Mapped all expired and lapsed patents directly to the client's product architecture at the functional module level, confirming that the expired claims fully covered the relevant features — establishing clear legal freedom for each product element.

3 Active Family Member Verification

Verified that no active family members, reissued patents, or pending continuation applications existed across any jurisdiction that could create future legal exposure — closing off the PAE acquisition risk vector.

4 Formal Legal-Status Map Delivery

Compiled a structured legal-status map documenting the expiry basis, lapse reason, and freedom basis for each identified patent family, providing the client with a defensible record to support commercialization decisions and investor due diligence.

Patent Status Classification Applied in This Engagement

Each identified patent family was classified by legal status and confirmed clear before the product launch decision was made.

Statutory Expiry

20-year term elapsed from filing date — no residual rights

Maintenance Lapse

Abandoned due to non-payment of maintenance fees — expired

Terminal Disclaimer

Family member co-expiry confirmed — no extensions possible

No Active Continuations

No pending CIP or divisional applications identified

⚡ KEY INSIGHT

Several patents that initially appeared to pose FTO risk were **fully expired — and critically, all remaining family members had also lapsed** due to non-payment of maintenance fees or statutory expiration. No active continuations, reissues, or live family members existed in any jurisdiction. The apparent FTO risk was entirely an artifact of **incomplete legal-status review** — a surface-level claim overlap analysis had flagged patents as risky that were legally dead. Once full family-level verification was complete, the product path was confirmed clear across all relevant jurisdictions.

RESULTS

◆ Clear Product Path

Determined that all core blocking patents were safely expired — establishing a clear, legally documented freedom to commercialize the hardware product across all target jurisdictions without design changes.

◆ Formal Legal-Status Map

Delivered a structured legal-status map documenting the expiry basis, lapse reason, and freedom basis for every identified patent family — providing a defensible record for product launch and investor due diligence.

◆ PAE Risk Eliminated

Confirmed no active family members, reissued patents, or pending continuations existed — closing off the patent assertion entity acquisition risk vector that had been the client's primary concern.

IMPACT ON CLIENT

- ✓ Client avoided unnecessary and costly design changes that had been under consideration purely as a precautionary response to the surface-level claim overlap flags.
- ✓ Eliminated the need for licensing negotiations or design-arounds by confirming that all relevant patents had fully expired with no enforceable residual rights in any jurisdiction.
- ✓ Provided a formal legal-status documentation package suitable for board-level reporting, investor due diligence, and M&A readiness — demonstrating that the product path had been legally verified.
- ✓ Client proceeded confidently to commercialization knowing that no patent assertion entity could acquire the expired references and assert enforceable rights through reissue or continuation strategies.

KEY TAKEAWAYS

- ▶ Claim language overlap alone is not sufficient to establish FTO risk — legal status verification at the family level, across all jurisdictions, is an essential second step before any risk assessment is finalized.
- ▶ Expired patents require end-to-end prosecution history review: maintenance fee records, continuation filings, terminal disclaimers, and patent term adjustments must all be confirmed before a family is declared legally dead.
- ▶ The patent assertion entity risk vector — acquisition of expired references for reissue or continuation assertion — requires explicit verification that no pending applications or reissue requests exist before product launch.
- ▶ A formal legal-status map is a valuable commercial asset beyond the immediate FTO decision: it supports investor due diligence, M&A processes, and licensing strategy by documenting cleared IP risk with verifiable records.

VALUE DELIVERED

By conducting a granular family-level legal-status review across all jurisdictions — covering maintenance fee records, continuation filings, terminal disclaimers, and patent term adjustments — IIPRD confirmed that every patent initially flagged as a potential blocker was fully expired with no residual enforceable rights. The client received a formal legal-status map, avoided unnecessary design changes and licensing costs, and proceeded to product launch with a documented, defensible FTO clearance. This engagement demonstrates that rigorous legal-status analysis is as strategically valuable as the prior art search itself — and that surface-level claim overlap flags, without full family verification, routinely overstate FTO risk.

