Intellectual Property Investigation

Patent Infringement Investigation for IP Assertion Purposes

Our work supports our clients Intellectual Property (IP) licensing and litigation actions and helps their legal and technical professionals to capitalize on and protect their corporate R&D. We uncover key intellectual property information concerning circuit design, processing, and semiconductor technology of target products and companies that may be infringing particular patents. This information is also used by our clients to achieve a more effective Intellectual Property assertion strategy.

Our expertise helps identify strengths and weaknesses in an IP portfolio. We can identify the ‘strong’ patents in a portfolio and follow through with detailed technical investigation. The intellectual property insight we deliver can also be essential in helping our clients define licensing opportunities. We identify target portfolio weaknesses and we can help establish a strong IP defense based on the in-depth technical evidence we gather. We have decades of experience preparing and analysing a wide range of technologies and IC designs and we’ve perfected proprietary delineation and feature enhancement techniques, in order to clearly display the IP detail of interest.


Example of the circuit evidence we gather for the claim chart formulation. This patent has 5 parts to the independent claim and we have colour coded each claim as we have identified every part of the circuitry that represents the claims.

Example of Intellectual Property investigation concerning semiconductor technology.
Example of Intellectual Property investigation concerning semiconductor technology.

Example of Intellectual Property investigation concerning software interface.

Intellectual Property investigation concerning software interface. We electrically identify each part of the patent claim: “…at the same time, the second transmission interface 12 activates the frame transmission procedure. After gaining network channel authority, the second transmission interface 12 transmits the preamble and the header to the wireless network 30…”

Patent infringement analysis:

- Detailed familiarization with patents in question
- Physical preparation & investigation of product
- Identify fabrication process specific information
- Extract technology information
- Extract design schematic & layout information
- Correlate to patent claims & document observations

Patent portfolio management:

- Identify strengths & weaknesses of client’s & target’s patent portfolios
- Identify client’s strong patents & conduct infringement analysis
- Define licensing opportunity based on target portfolio weaknesses
- Establish defense potential where necessary

Product market analysis:

- Identify overall turnover regarding a particular product line or family
- Identify corresponding world market
- Judge product line / product family revenue for a given manufacturer

Design extraction uses images of the IC after each stage of selective de-layering
Prior art investigation:

- Literature review, conference & workshop material research, analysis of existing ICs and patent database investigation.

Counterfeit investigation:

- Product exterior analysis & documentation.
- Product non-destructive interior analysis (CT-SCAN, X-ray, SAM analysis, etc).
- Electrical parameter measurements and functional testing.
- Materials analysis
- Reverse engineer to identify the taxonomy of design and technology defects in counterfeit component.

Copyright investigation:

- High resolution imaging of circuit layout detail at each stage of de-layering
- Compare and contrast each level of layout detail

Competitive analysis:

- IC design extraction / ‘tear down’ / reverse engineering.
- Process technology extraction / ‘tear down’ / reverse engineering.

Expert witness in court & ITC:

- We are experienced in supporting our evidence in court.
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