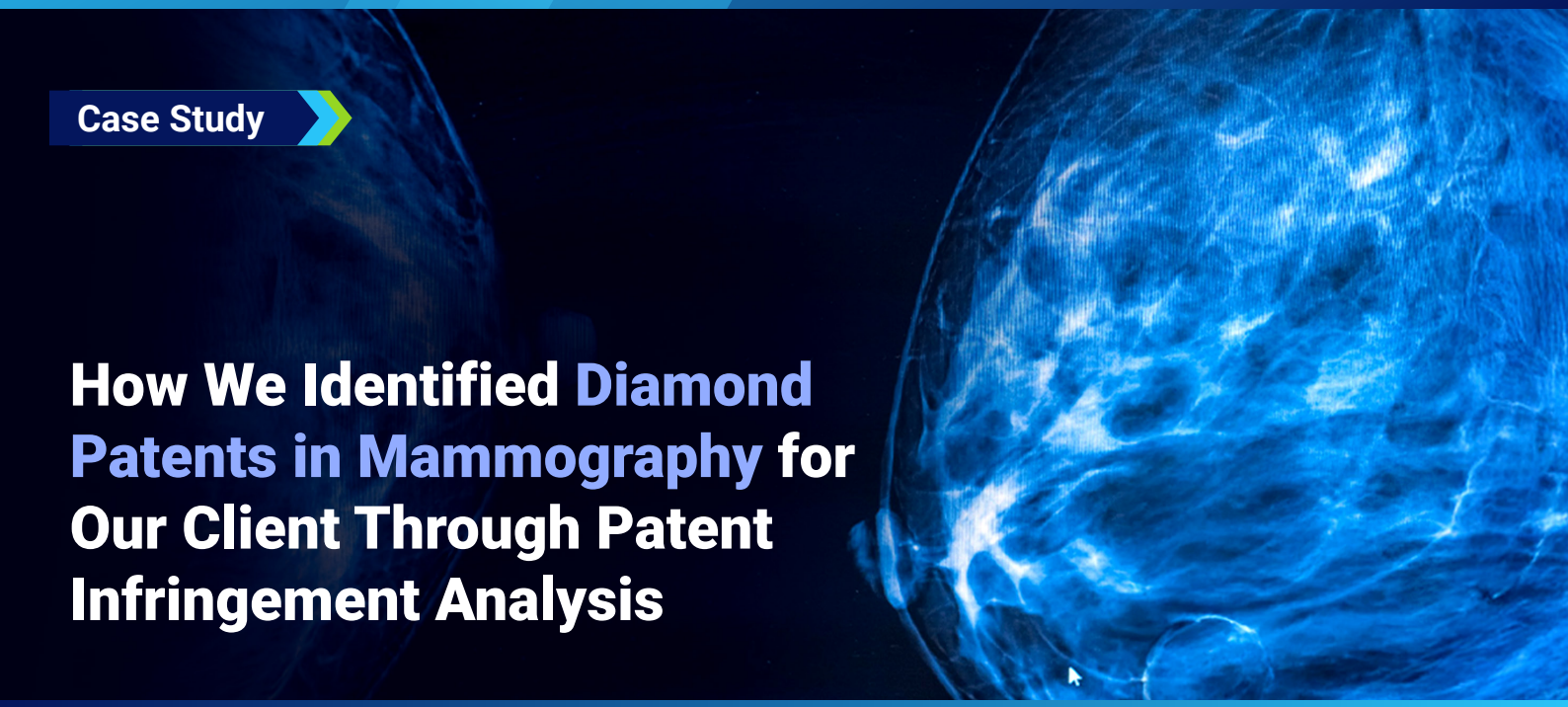
Ingenious Brain

Case Study



How We Identified Diamond Patents in Mammography for Our Client Through Patent Infringement Analysis

Client's Objective

ABC Corporation, a global leader in medical imaging and AI-assisted diagnostics, sought to identify high-value, enforceable "diamond patents" within their extensive mammography portfolio. Their goal was to evaluate these patents for potential licensing or infringement actions.

Our Strategic Approach

We employed advanced patent analytics and strategic methodologies to systematically identify high-value patents within ABC Corporation's mammography portfolio, ensuring a precise evaluation for potential licensing or infringement actions.

Step 1: Identifying the Technology Cluster using AI classification

We created a focused technology cluster related to mammography by filtering ABC's portfolio using the combination of keywords, such as "digital breast tomosynthesis," "compression plates," "dose optimization," and "X-ray breast imaging," alongside relevant CPC/IPC classifications, including A61B6/00 (Apparatus or devices for radiation diagnosis; or combined with radiation therapy equipment).

Using patent analytics platforms and the support of technology-based clustering algorithms using AI clustering, we identified a key cluster centered on "*Digital Breast Tomosynthesis*," comprising over 50 patents that cover automated breast positioning, image reconstruction, radiation dose control, and compression plates.

Step 2: Ranking the Patents

Once the clusters were established, we ranked the patents based on the qualitative & quantitative factors such as:

- **Forward citation count** (indicating influence and potential industry use)
- **Legal status** (favouring active and granted patents)
- **Patent family size** (reflecting geographic protection and investment)
- **Claim Size** (broad, independent claims offering more leverage)
- **Technical relevance** (assessed by mapping the patent to known market trends)
- **Age** (focusing on patents that are 5–10 years old—mature, but still enforceable)

Based on the above factors, the top-ranking patents that emerged were USXXXX558B2, USXXXX607B2, USXXXX274B2, and USXXXX389B2. Among these, **USXXXX558B2** *[3D Mammography apparatus comprising arrangement of various components]* stood out due to its forward citations, key role in imaging functionality, and alignment with the current mammography systems on the market.

Step 3: Identifying Potential Patent Infringement

We conducted a comprehensive market scan of competitor patents (Company X, Y, Z) to determine whether competitors might be infringing on ABC's high-value patents. This process involved two main techniques:

1. **Citation Analysis:** Through this technique, we identified several patents from Company X and Y that referenced ABC's patent USXXXX558B2, indicating a technical and developmental overlap.
2. **Product-Publication Mapping:** We thoroughly reviewed public documentation to find real-world features in commercial products that potentially align with ABC's patent claims.

This revealed that Company X's Mammography Apparatus utilizes adaptive breast positioning and real-time 3D image quality enhancement, which closely resemble the claims in ABC's USXXXX558B2.

Step 4: Feasibility Analysis of High-Ranked Patents

After identifying the potential infringers, we assessed the feasibility of enforcing or licensing top patents by evaluating:

- **Technical overlap** with competitor products
- **Legal enforceability** (active and strong claims)
- **Evidence availability** from product claims and public disclosures
- **Market relevance** (importance to core functionality)

USXXXX558B2 was identified as a strong candidate for enforcement due to its relevance to Company X's product features and its active legal status.

Step 5: Preparing the Evidence of Use (EoU) Chart

We created an Evidence of Use (EoU) chart to demonstrate how **USXXXX558B2** maps to Company X's product features, supporting potential infringement or licensing strategies.

Conclusion

By identifying **USXXXX558B2** as a key patent with both technical and legal strength, ABC Corporation can leverage it for licensing negotiations, cross-licensing, or litigation. This approach of patent mining and developing EoU charts is crucial for monetizing intellectual property, sustaining a competitive advantage, and navigating complex IP landscapes in the medtech sector.

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