

Opportunity Genesis: Creating Value from the Patent Remainders Bin

Client: *Global 2000* world-leader in test and measurement instrumentation.

Challenge: The client was an established leader in measurement instrumentation and disposable sensors used in a wide range of industries. Due to basic patents expiring and low-cost competition emerging from Asia, the product offering was becoming commoditized. Even as the client's market share was under attack, their R&D spending was growing, just to hold position. The client needed to improve the effectiveness of their R&D to deliver protectable and sustainable differentiation to the marketplace.

Diagnosis: The client possessed a good understanding of the more premium segments of their market, but was surprised by the effectiveness of the Asian competition with their "good enough" measurement systems. The client's R&D efforts and aging patent portfolio had always been focused on being the absolute best in the marketplace. They had not focused on satisfying the needs of more cost sensitive customers with a slightly premium "good enough" product offering. The client needed a means to differentiate a product line at a moderate price point, and elevate it above the commodity offerings.

Methodology: Product Genesis began with a review of the existing products and market bundles, focusing specifically on the "razor and razor blade" type offerings of instrument systems and associated, disposable sensors. These products were the most profitable, and the most under attack by the Asian competition. The client's intellectual property was also mined for other available technologies and related techniques.

Working with commercial customers in the market segments attracted to the Asian offering, a prioritized set of needs around the product offering was developed. Through both observational and individual interview techniques, a number of latent needs were identified. One of the strongest latent needs, involving making measurements on increasingly small samples using only a single disposable sensor, had already been solved by the client in an expensive premium product. This

premium product was about to lose patent protection, and had never been successful at its high price point. The client was convinced that the approach was a loser.

Building on our IP Opportunity Scan framework, Product Genesis went back to the client's patent portfolio and R&D teams to better understand the real capabilities of the client's technology. With careful questioning and data review the R&D people admitted that the patented approach using only one disposable sensor was only moderately good at making the measurement. Even with a lot of added cost in the instrument electronics, the market requirement that the instrument must work with everyone's disposable sensors resulted in only OK results for the customer. One scientist lamented that the results could be really good, but only if one particular property of the sensors could be controlled.

The breakthrough came by reversing the logic of the original measurement patent; a disposable sensor with the specific unique property would enable the development of a less expensive instrument. IP mapping had already identified a licensable manufacturing process patent that provided, as a byproduct, the ability to control the critical sensor property. The simplified instrument could now be offered at a moderate price point. It gave "good enough" results when used with any disposable sensor, but gave excellent results when used with the matched sensors that would be slightly premium priced.

Results: The Opportunity Genesis approach identified the need to provide a differentiate product at a moderate or slightly premium price point. By mining the clients IP portfolio and technical capabilities, a unique and valued differentiation was uncovered that could be delivered with new IP built on the clients' soon to expire patent. Additional IP was exclusively in-licensed to complete the protection of the differentiation. The new approach delivered both "good enough" results to the price sensitive segment and an ongoing sell-up opportunity from the high-margin premium disposable sensors which were purchased throughout the use life of the product. The resulting product line reversed the market share decline, locked-in a long-term premium revenue stream, and delivered double digit profit growth.

