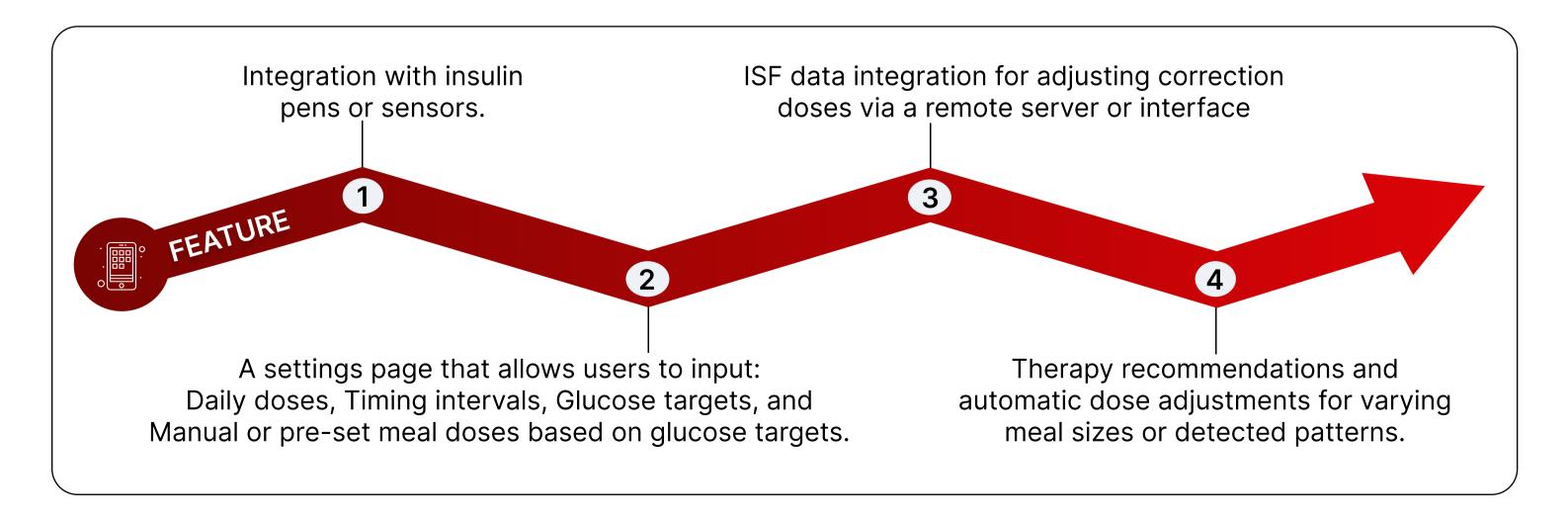


UNDERSTANDING THE FTO SEARCH

Performing a Freedom to Operate (FTO) search early in product development helps companies identify potential patent infringement risks and maximize return on investment. In this case study, we conducted an FTO search for a Diabetes Management Application, focusing on active patents and pending applications in the US and EP jurisdictions. The goal was to ensure the product did not infringe on existing intellectual property, mitigating legal risks and enabling smooth commercialization. This study highlights the critical role of FTO searches in bringing innovative diabetes tracking technology to market.

FEATURES OF THE DIABETES MANAGEMENT APPLICATION

The client's product includes several key functionalities:









HOW WE TACKLED THE **TASK**

1. DEFINING THE SCOPE

The first step was to clearly define the technology and features of the Diabetes Management Application. This included its hardware components (insulin pens or sensors), software elements (data processing algorithms), and its unique selling points (USP) like advanced Diabetes metrics & real-time feedback.

2. IDENTIFYING KEY TERMS AND CLASSES

We compiled a comprehensive list of keywords, their synonyms, and their related IPC/CPC classes related to the technology. The keywords included like "Glucose, Sugar, Hypoglycaemic, Hyperglycaemia, Diabetic, Polygenic, Meter, Sensor, Detect, Measure, Monitor, Record, Calculate, Compute, Estimate, Count, Therapy, Treatment, Remedy, Cure, Monitor, Administer, Supervise" etc.

3. SEARCH METHODOLOGY

We initiated the search process by employing various strategies, including using various keywords and their synonyms, as well as the International Patent Classification (IPC) and Cooperative Patent Classification (CPC) codes. We combined keywords with orbit operators such as AND, OR, S, D, P AND NOT to enhance the search results. Additionally, we applied specific classification codes pertinent to diabetic technology and health monitoring.

The search was further refined using jurisdictional and active status filters. We then meticulously analysed the search results, identifying patents or patent applications that pertain to the features of the proposed product. Each patent's claims were carefully assessed to determine any potential overlap with our technology, demonstrating the thoroughness of our evaluation process.

We used several databases, including Orbit, Patsnap, PATSEER, Google Patents, Espacenet, and the United States Patent and Trademark Office (USPTO) database to facilitate this. By conducting searches with the chosen keywords, their synonyms, and associated IPC/CPC codes, we were able to compile a comprehensive set of potentially relevant patents.



CHALLENGES

During our search, we encountered numerous patents & patent applications related to diabetes management applications. However:







- Some of these patents included additional claim elements that were not present in our product.
- A few patents were already known to the client, as they had previously provided us with a list of these references.
- The initial search results were extensive, & many of the patents were not directly relevant, making the task of identifying pertinent patents quite timeconsuming.
- To address this, we decided to refine our approach by conducting a broad search and developing distinct search strategies for each individual feature of the product. We utilized the most relevant IPC/CPC classes and specific keywords for each feature in our updated search strategy.

APPROACH TO FINDING THE REFERENCE

- Dupon analyzing the search results, it became apparent that certain entities were actively involved in developing diabetes management applications. We focused on these key entities and crafted a targeted search strategy based on the leading assignees and the most relevant IPC/CPC classes.
- We also reviewed both backward and forward citations of patents previously shared by the client to identify essential patents & their subsequent advancements.

- Along with that, we developed a specialized search strategy specifically for ISF data integration related to adjusting correction doses via remote servers or interfaces in diabetes management applications. This approach yielded several pertinent patents and applications for our Freedom to Operate (FTO) search report.
- Ultimately, we delivered a comprehensive analysis of the shortlisted patents and insights, offering our client a thorough understanding of the patent landscape and actionable recommendations to mitigate potential risks.



TYPES OF REFERENCES SHORTLISTED

- We identified 20 patents and patent applications that disclose at least one feature of the product. These relevant patents are organized sequentially based on their relevance, beginning with references with broad claims and progressing to those with more specific, narrower claims.
- We also found ten related patent references, which are also very close to the subject product, but they include one additional element in the claim.









REPORT & CONCLUSION

We successfully identified key patents and evaluated potential infringement risks by combining broad and focused search methods, leveraging multiple databases, and consulting with experts. Although we faced challenges such as handling large volumes of data and navigating complex patent claims, our strategy effectively delivered a clear overview of the intellectual property landscape & ensured that the new product could be developed with minimized risk of legal issues.

The search report was organized into several sections: summary, key features, keywords and classes, relevant results, and related results. The key features of the product were detailed in the "Key Features" section, while the "Relevant Results" section listed patents and applications whose claims align with the product's features. Only those patents where all independent claims match the product features were included in this section.

Patents or applications that contained additional claimed features beyond those present in the product were listed in the "Related Results" section instead. Finally, a comprehensive summary was provided in the "Summary" section.

TIPS

- Start with a wide range of keywords and synonyms. If you are running the logic/string in the title, abstract, & claims, avoid using the operator S or P.
- ► Use relevant IPC/CPC codes for comprehensive coverage.
- Develop specific strategies for individual product features.
- ▶ Review backward & forward citations of key patents to identify essential references & advancements.
- ► Run some logic/string in the fields of description or full text, instead of just in the title, abstract, and claims.

Expert

Manish is a prominent tech analyst with over 5 years of experience and a keen interest in pioneering technologies such as 3D Printing, IoT, 4G/5G, Wi-Fi, Blockchain technology & smart electronics. Spearheading various IP projects, he conducts comprehensive tasks ranging from novelty searches to infringement analyses, showcasing his proficiency in navigating complex technological landscapes. Holding a degree in Electronics and Communication from Punjabi University Patiala (Punjab), Manish possesses a solid foundation in engineering, which further bolsters his expertise in the field.

