

Product Pulse

by Mert Bulut

Physical Product Development, Technology & Supply Chain



Top 3 Methods to Protect Your IP Before Getting Your Patent

One of the biggest concerns for physical product entrepreneurs is finding out your product is copied before even you launch.

New product development takes a long time and how will you protect your IP during all this time?

Here are the top 3 methods to protect your intellectual property before launching your product. (Page 2)



Your First Prototype

You already figured out your product idea, but how do you test it? Do you need to invest a lot for product design first? Also what kind of prototype do you need to make? It all matters as a first time entrepreneur with limited budget. (Page 4)

Best Innovations in CES 2025

The biggest technology show of the year CES 2025 is over. From Artificial Intelligence, to Digital Health, Robotics to Audio. Let's take a peek at some of the best innovations this year in CES. (Page 3)

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1 Do not go to a supplier who is making similar products. Use a contact manufacturer.

Going to a manufacturer who is producing similar products may help you to save cost and time. Because the supplier already has the knowledge and experience. But it creates a huge risk.

- If your supplier likes your idea, probably they will do their own version and launch even before launching your model. Probably in a different market that you will not notice in the beginning.
- Your supplier's another customer who is a potential competitor to your business, can see your product during a regular factory visit. In the sample room, on engineer's desk or in the production line.
- The employee who is working in the supplier may tell about your product to their another customer during a business meeting or a dinner.

Either way do not take the risk.

Top 3 Methods to Protect Your Intellectual Property Before Getting Your Patent



2 Use independent product design & development companies. Do not let your factory design for you. And independent development company will ensure your product idea won't leak to anyone.

Also you will have full control over the design files. Later if you hire your in-house RD team, you can take over the development to yourself.

When you want to exit your business, you can easily sell your business as you hold your assets, your IP.

3 Sign NDAs or NNNs with your suppliers. Not only the manufacturer, but also your component suppliers (if you need to disclose your product details)

As the last resort, if you have any conflict with your supplier along the way, you will have mutually agreed terms in a contract that you can use in legal ways.



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1 Best Innovation – Artificial Intelligence: Booxtory.

South Korea's 'Booxtory' uses AI to digitize books in real time and provides an immersive reading experience. Once a book is scanned, the platform analyzes its content and converts it into either an audio or standard reading format. It also offers real-time translation into multiple languages, adding a global edge. Booxtory can also generate a song about the book using the "Song Mode." Booxtory will be available for purchase in March 2025.



Best Innovations in CES 2025

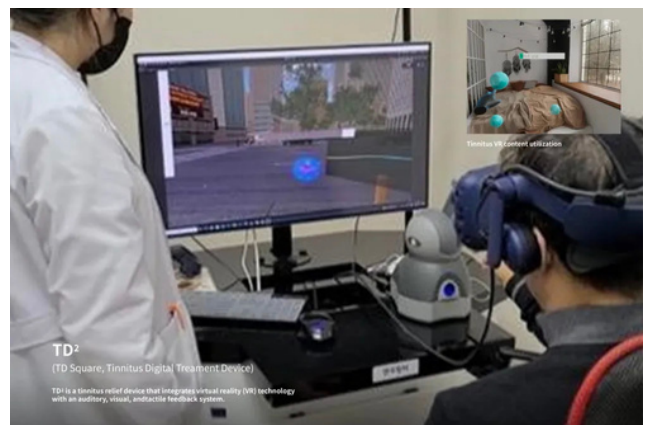
2 Best Innovation – Robotics: Hypershell X

The World's First Outdoor Exoskeleton. Merging robotics, ergonomics, and AI in a compact design, the battery can last for an impressive 17.5 km range on a single charge. Hypershell X boosts lower limb strength, reduces physical fatigue during outdoor activities, and enhances the overall athletic performance.



3 Best Innovation – Digital Health: TD Square (TD2)

by Hanyang University is an innovative digital therapy device that combines cognitive therapy with auditory, visual, and tactile feedback systems integrated with virtual reality (VR). Unlike traditional tinnitus treatments that rely on medication with potential side effects, TD Square uses AI-generated stereophonic sound within a VR environment to effectively manage and relieve tinnitus symptoms, offering a non-invasive solution for relief.



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- 1 **Proof of Concept:** This is the very basic type of prototype you should start for your product idea. You don't need to invest on industrial design or complete software development, etc.

Use the existing components in the market to demonstrate your product idea as simple as possible.

If there is a special mechanism is involved, find a product which already has it. If you have an electronic function involved, likewise. use the existing camera, development board, etc. Keep minimum investment. Before moving to next stage.



- 2 **Design Prototype:** After you confirm your proof of concept then the industrial design process starts. Once the design is finalized, the first step is to have a design prototype. This prototype is non-functional, just to demonstrate how the design looks like, overall form factors, and some basic mechanical features.

- 3 **Working Prototype:** This is the prototype where all the functionality is added. Electronics, software, all the mechanisms are expected in this prototype.

- 4 **Visual Prototype:** At this stage all the design elements, final finishing, color, processes are included in the prototype. This will give an idea to the customer how the product will look in the mass production. Depending on the situation visual prototype and working prototypes can be combined during the project.

