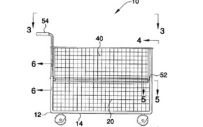


# EXPANDABLE CART APPARATUS

## MIND TO MARKET EXPLAINED

Roy F. Johnson received his patent for Expandable Cart Apparatus in May 2007, but absence of working prototype was the biggest hurdle against licensing his patent. The IDEA team worked together with the client and came up with a product that was marketable and could be manufactured



Patent No. 7213821



- 1 RESEARCH**  

IDEA team did a brainstorming with the client to absorb his presumptions and vision about the proposed product. A thorough market analysis was made to understand user behavior, requirements, technological inputs and design prediction.
- 2 INDUSTRIAL DESIGN**  

A detailed analysis was done to address the ergonomic factors & usage environment. Minute details like control for collapsibility, star wheel, assortment of holders on the frame top, slots on panels for better handling, were integrated with the design.
- 3 ENGINEERING**  

Engineering team optimized the design from the manufacturing perspective. Thus, further streamlining the product with the production realities.
- 4 ANIMATION**  

The animation storyboard clearly showed the 360deg view of the product. In addition, it also depicted the details of the product, its components, as well as usage.
- 5 MANUFACTURING ASSESSMENT**  

IDEA's team of manufacturing expert ensured that each part and sub-assembly was fine-tuned for eventual cost effectiveness and efficient manufacturing by picking the right materials and process for the job.
- 6 MARKETING LICENSING PORTFOLIO**  

MLP explains the design engineering and manufacturing details of the product along with establishing its context and usage that would help potential manufacturers and licensees make informed licensing decisions.