Innovative Ideas

Smart crutches(<u>www.mytorchit.com</u>) is a design

improvement of the traditional crutch crafted to improve the mobility of a person using crutches. It is the world's first self-standing crutch. By using a specially crafted metal flexures based tip design, the Smart Crutch substantially improves the stability and mobility of a patient while keeping the cost low. It also incorporates smart techniques to keep energy usage low. The ultimate result for a user is that the energy used is minimal and there are no impact forces carried to the body thus mitigating side effects. The design additionally increases grip on rough terrains such as sand, pebbles and wet surfaces.

In a nutshell, the product improves the quality of life of the people by enhancing stability, providing feature by slip resistance, all-terrain, self-standing and shock absorption (10-15%), less effort for walking (reduction by 20%). The product will improve the productivity of the person using it. He /She will be able to commute anywhere without any fear of falling, which unleash his /her skills to perform new tasks.



Picture shows four male persons using smart crutches-one crossing the road, the second person walking , third person -a leg amputee using it and the fourth person with the crutch jumping over a hurdle