Abstract
A newly engineered trocar mediating surgical instruments during laparoscopic surgeries is disclosed in this technology offer. Trocar designed herein with its superior maneuver capability aims to solve several problems that are associated with the available trocar technology such as maneuver capability, ease of surgical instruments transfer through the trocar, operator’s ease of use.

Technical Overview
Trocars are the surgical apparatus that are used during closed surgeries and operations. The surgical instruments used during the surgery such as scissors and camera are passed through these apparatus into the abdominal cavity during the surgery. Development of enhanced trocars makes laparoscopic surgeries more favorable and thus lowering the need for open surgeries wherein those surgeries are commonly more risky, tend to have more complications and have longer postoperative recovery periods. Therefore minimal invasive surgeries are replacing open surgeries with the advancements on the trocars.

Trocars have various “valve mechanisms” in order to maintain the body pressure. Since the valve mechanisms are complex in structure, the outer body of the trocar becomes larger in diameter causing maneuver loss. Another issue with the conventional trocars which are not mostly made from flexible materials is the difficulties of the surgical instruments’ transfer especially the curved and larger parts. And yet, one other drawback of the trocar design of today’s technology is the hose of the air inlet channel which extends towards the hand of the operator disturbing the operator.

This newly designed trocar is introducing solutions to the drawbacks that are listed above.
Technology Features & Specifications
Trocar represented herein is designed such a way that it delivers solutions to the conventionally available trocars.

It has narrower outer diameter which enhances the maneuver capability of the trocar making operations easier to conduct. And yet the trocar is designed in such a way that the air hose that is attached to the air inlet channel does not extend towards the hand of the operator ensuring ease of use.

Furthermore, the material that the trocar is made up of chosen from a flexible material unlike most of the conventional trocars so that the transfer of surgical instruments especially the large and curved ones became much easier.

Potential Applications
Technology is applicable in Healthcare Industry for laparoscopic surgeries.

Customer Benefits
- Enhanced maneuver capability
- Flexible nature for making the transfer of surgical instruments more favorable
- Better design for handling
- Design that prevents slipping inside the body of the patient

Market Trends and Opportunities
According to a recent report by Global Industry Analysts, the global market for laparoscopic devices is projected to reach US $9.5 billion by 2020, driven by the growing volume of minimally invasive procedures and technological innovations surrounding laparoscopy devices.

Laparoscopy evolved to become a standard procedure in general surgery. Given its intrinsic advantages such as limited post-operative trauma, less scars, quick recovery and cost efficiencies in treatment, laparoscopy is increasingly being adopted.

Additional Technical Information
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