

## 6.0 Claims

The embodiments of the invention in which exclusivity is claimed are as follows:

Claim 1: An end effector for minimally invasive instruments, comprised of two jaws, with the upper jaw consisting of a protruding scissors blade and a textured grasper surface, and the lower jaw consisting of a corresponding scissors blade embedded in its side face, a corresponding textured grasper surface and a hook, with the two jaws thus jointly comprising Scissors, a Hook and a Grasper, being activated by a handle operating an inner rod connected to an angled slot found on each jaw, along which moves a pin, connecting the said jaws, in perpendicular motion to the opening and closing of the jaws, with the said end effector having a hole through which a fixed screw is passed to connect it to the outer shaft of the instrument, with the slot being closer to the handle than the hole, followed by the scissors, the grasper and the hook, with the functioning of the scissors and the grasper being perpendicular to the functioning of the hook.

Claim 2: The end effector according to Claim 1, further comprising a hook in the upper jaw.

Claim 3: The end effector according to Claim 1, wherein the grasper surface is ribbed textured.

Claim 4: The end effector according to Claim 1, wherein the grasper surface is diamond textured.

Claim 5: The end effector according to Claim 1, wherein the cutting edge of the Scissors is retracted in the combined instrument.

Claim 6: The end effector according to Claim 1, wherein an extra flat section is added behind the ribbed teeth of the grasper jaws so as to allow the grasped object to protrude at their backside.

Claim 6: The end effector according to Claim 1, wherein clearance is left between the upper and lower grasper teeth by adding a step behind the grasper.

Claim 7: The end effector according to Claim 1, further comprising a through slot on the upper jaw .

Claim8: The end effector according to Claim 1, further comprising a retraction of the hook at the back.