

## Branch Vessel Stent and Graft

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### TECH FIELD(S)

Biomedical Engineering – Medical Devices

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### FEATURES

Patients with abdominal aortic aneurysms near or involving the renal arteries are presently considered poor candidates for implantation of an endovascular stent graft, because currently available endovascular grafts require at least 1-1.5 cm of healthy aorta on each side to allow the graft to be securely anchored in place. This device extends this minimally-invasive treatment to the substantial proportion of abdominal aortic aneurysm patients, approximately 30% - 50%, for whom endovascular grafting is considered too risky at the present time. ***This device provides for minimally invasive repair of abdominal aortic aneurysms located in close proximity to the renal arteries or other branches and when there is less than 1 cm of healthy aorta available.*** The prototype is an expandable metal framework covered in fabric composed of FDA approved materials: memory alloy is Nitinol (nickel-titanium alloy), covered with ePTFE (polytetrafluoroethylene) and woven polyester.

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### BENEFITS

- Extends treatment for aortic aneurysm to 30% to 50% more patients
  - Can be securely anchored when there is less than 1 cm of healthy vessel available
  - Can be securely anchored in close proximity to renal arteries and other branch vessels
  - May include multiple branches
  - Self-centering
  - Constructed of FDA-approved materials
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### INVENTOR(S)

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### INTELLECTUAL PROPERTY STATUS

Patent applied for.

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### CONTACT

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