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**Hartley et al.**

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(54) **METHOD AND DEVICE FOR TREATING AORTIC DISSECTION**

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(51) **Int. Cl.**

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| ***A61F 2/90*** | (2013.01) |
| ***A61F 2/07*** | (2013.01) |
| *A61F 2/82* | (2013.01) |
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CPC ... ***A61F 2/90*** (2013.01); ***A61F 2/07*** (2013.01); *A61F 2/89* (2013.01); *A61F 2002/826* (2013.01); *A61F 2002/828* (2013.01); *A61F 2002/8483* (2013.01); *A61F 2002/8486* (2013.01); *A61F 2220/0016* (2013.01); *A61F 2220/0075* (2013.01)

(58) **Field of Classification Search**

USPC ..... 623/1.11, 1.13, 1.16, 1.12, 1.23

See application file for complete search history.

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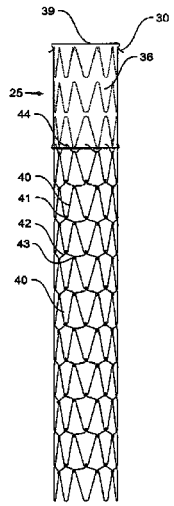
(57) **ABSTRACT**

A prosthesis adapted for inter-luminal placement by endovascular deployment for the treatment of vascular dissection, the prosthesis has a self expanding stents (**38**) connected together to define an elongate lumen wall engaging surface. At least one of the stents has a bio-compatible graft material cover (**36**) to define a covered portion (**25**). The cover is adapted to close off a rupture (**7**) in the wall of the lumen (**6**) and the stents are adapted to provided pressure on the wall of the lumen adjacent to and extending away from the rupture.

**4 Claims, 5 Drawing Sheets**