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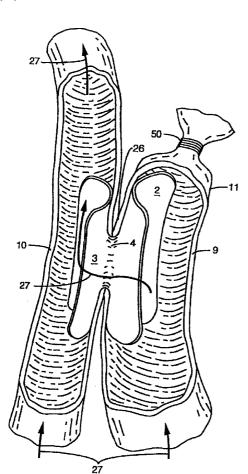
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[Continued on next page]

(54) Title: DEVICES AND METHODS FOR INTERCONNECTING VESSELS



(57) Abstract: The present invention provides implantable devices (1) and associated methods for interconnecting human vessels in a side-to-side or an end-to-side arrangement rapidly, safely and in a minimally invasive manner. The devices comprises at least a first segment (2), a second segment (3), and a flow opening (4) between the at least one segment and the second component when operatively used. The first segment is flexible and has physical and mechanical properties which allow it to be easily inserted into a vessel, to conformably seal with the inside wall of the vessel and to be resistant to dislodging from the vessel. The second component may comprise a second segment having the same or a similar configuration as the first segment or may be a tubular member which extends from the first segment. The first and second segments are flexible for easy insertion into an incision made within the side of each vessel. Upon release from a constricted state, each flexible segment subsequently conforms to the interior walls of a vessel to provide a sealing contact along the contact surface of the segment inserted within. The tubular member is configured to be inserted into a transected end of a vessel. The flow opening provides fluid interconnectivity between the vessels connected by the implanted devices.

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| A. CLASSIFICATION OF SUBJECT MATTER | | | |
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| According to International Patent Classification (IPC) or to both national classification and IPC | | | |
| B. FIELDS SEARCHED | | | |
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| U.S. : 606/153, 154, 155 | | | |
| Documentation searched other than minimum documentation to the extent that such documents are included in the fields | | | |
| searched | | | |
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| Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) | | | |
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| C. DOCUMENTS CONSIDERED TO BE RELEVANT | | | |
| Category* | Citation of document, with indication, where app | propriate, of the relevant passages | Relevant to claim No. |
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