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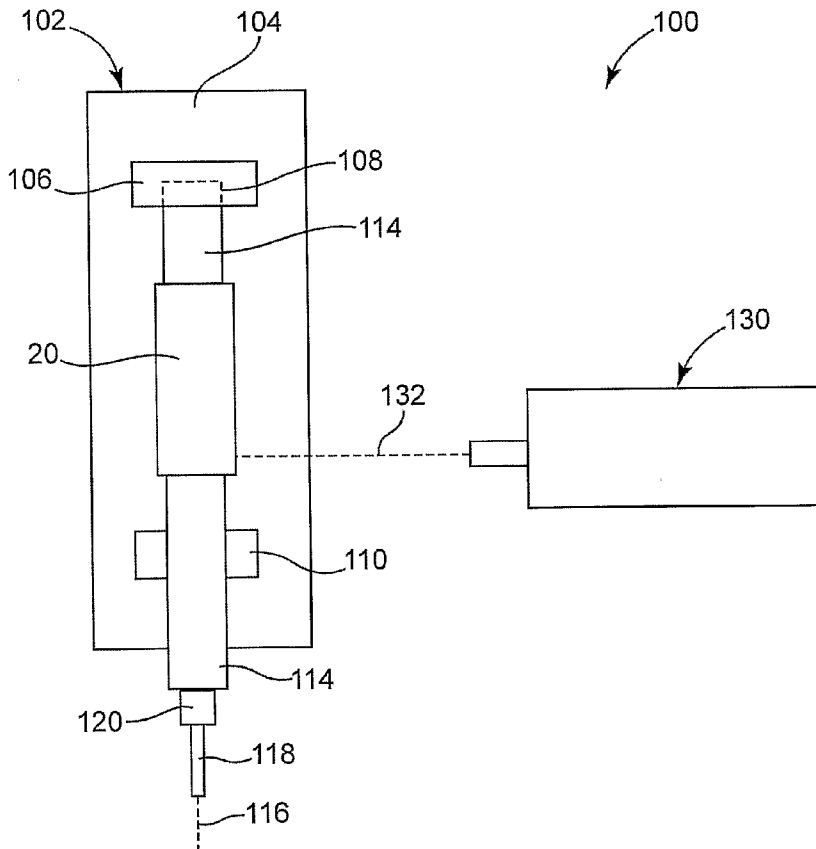
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[Continued on next page]

(54) Title: COMPOSITE HEART VALVE APPARATUS MANUFACTURED USING TECHNIQUES INVOLVING LASER MA-
CHINING OF TISSUE



(57) Abstract: Methodology for using laser machining techniques to modify a tissue for use in a medical device. In a representative mode of practice, relatively low energy laser machining is used to thin down at least a portion of a valved jugular vein. The thinned down vein may then be sutured to, or otherwise integrated with, a corresponding stent to make a percutaneous heart valve.

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FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - A61F 2/06, 2/24 (2007.01)

USPC - 623/1.13, 1.24, 2.13

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC(8) - A61F 2/06, 2/24 (2007.01)

USPC - 623/1.1, 1.16, 1.32, 1.45, 1.21, 1.26, 2.14

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

USPTO EAST System (US, USPG-PUB, EPO, DERWENT), MicroPatent, IP.com, DialogPro

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X — Y	US 2003/0023303 A1 (PALMAZ et al) 30 January 2003 (30.01.2003) entire document	1, 8-9, 12-13 ----- 2-3, 4-7, 10-11
Y	US 2004/0048796 A1 (HARIRI et al) 11 March 2004 (11.03.2004) entire document	2-3, 10-11
Y	US 2003/0199971 A1 (TOWER et al) 23 October 2003 (23.10.2003) entire document	4-7
A	US 6,719,789 B2 (COX) 13 April 2004 (13.04.2004) entire document	1-13

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