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(71) Applicant (for all designated States except US):

KYPHON SÀRL [CH/CH]; Pierre-à-Bot 97, CH-2000 Neuchatel (CH).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **BROOME, Charles Brandon** [US/US]; 3 South Antigo Court, Greer, South Carolina 29650 (US). **GOSHAYESHGAR, Mojan** [US/US]; 61 Parker Avenue, Atherton, California 94027 (US).

(74) Agents: **PATEL, Samir R.** et al.; Medtronic Spinal and Biologics, 1800 Pyramid Place, Memphis, Tennessee 38132 (US).

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- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

Published:

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[Continued on next page]

(54) Title: COMBINATION DIRECTIONAL AND NON-DIRECTIONAL BONE TAMP

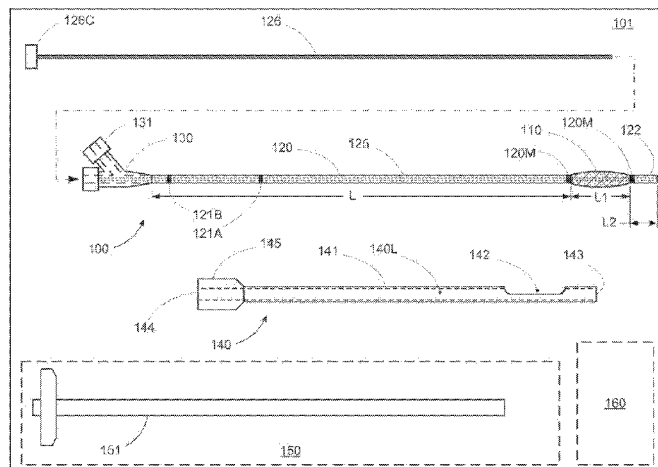
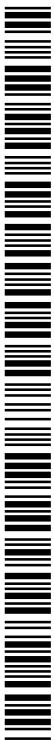


FIG. 1

(57) Abstract: A minimally invasive surgical system can include a cannula having a side port and an open distal end, and an expandable bone tamp. The bone tamp includes an elongate shaft coupled to an expandable element. The elongate shaft has a length adapted to align the expandable element with the side port or extend the expandable element completely beyond the distal opening of the cannula. In this manner, the cannula and bone tamp enable either directional (i.e., through the side port) or non-directional (i.e., completely outside the cannula) bone tamping.





— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

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PCT/US2012/045484**A. CLASSIFICATION OF SUBJECT MATTER***A61B 17/56(2006.01)i, A61B 17/34(2006.01)i, A61M 29/02(2006.01)i, A61M 25/01(2006.01)i*

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)

A61B 17/56; A61M 31/00; A61M 29/00; A61B 17/22; G05D 7/06; A61M 5/178; A61M 5/31

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

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

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

eKOMPASS(KIPO internal) & Keywords: catheter, cannula & tube

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2008-0065020 A1 (Christopher R. Ralph et al.) 13 March 2008 See abstract; figs 8, 10b, 11, 20; paragraphs 71,72,78-81,84,87,109; claims 1	1-4,6-8,10-12,14-15,17-18,20
A	,6,7,10.	5,9,13,16,19
A	US 05084010A A (PLAIA; MARK et al.) 28 January 1992 See abstract; figs. 1, 2; column 6, lines 22-43; claims 1, 5, 9, 10.	1-20
A	US 2011-0106007 A1 (AUYOUNG BRYAN J. et al.) 05 May 2011 See abstract; figs. 2C, 3B; paragraphs 34, 35; claim 1.	1-20
A	US 2010-0274180 A1 (DONOVAN BRIAN W. et al.) 28 October 2010 See abstract; fig. 2C; paragraphs 45, 46.	1-20

 Further documents are listed in the continuation of Box C. See patent family annex.

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Authorized officer

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