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(54) Title: SHIELDING DILATOR FOR USE WITH A CATHETER

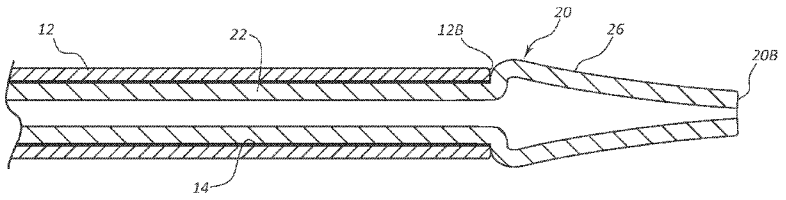


FIG. 4A

(57) Abstract: A dilator system for insertion of a catheter or other elongate device into a body of a patient includes a catheter having a lumen that initially defines a first inner diameter. The catheter includes a swellable material that swells after insertion into the body. A dilator includes an elongate body that is initially disposed in the catheter lumen and a tapered head extending from a distal end of the catheter lumen. The dilator head defines an outer diameter that is larger than the first inner diameter of the catheter lumen. After insertion of the dilator head and a distal portion of the catheter into the body, the catheter swells such that the lumen defines a second inner diameter that is larger than the outer diameter of the dilator head. This enables the dilator to be proximally removed from the body via the catheter lumen defining the second diameter.

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2012/020465

A. CLASSIFICATION OF SUBJECT MATTER
IPC(8) - A61M 29/00 (2012.01)
USPC - 604/913
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 2/00; A61M 25/00, 29/00, 31/00 (2012.01)
USPC - 604/11, 14, 48, 93.01, 96.01, 97.01, 103.02, 103.06, 103.14, 164.03, 264, 913; 606/191, 198

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)
MicroPatent, Google Patents, Public PatFT and AppFT

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4,710,181 A (FUQUA) 01 December 1987 (01.12.1987) entire document	28-30
X -- Y	US 2006/0212022 A1 (GELLMAN) 21 September 2006 (21.09.2006) entire document	1-4, 7-12, 14 ---------- 5, 6, 13, 15-27
Y	US 4,883,699 A (ANIUK et al) 28 November 1989 (28.11.1989) entire document	5, 6, 16-20
Y	US 6,436,119 B1 (ERB et al) 20 August 2002 (20.08.2002) entire document	21-27
Y	US 2002/0022046 A1 (TEDESCHI et al) 21 February 2002 (21.02.2002) entire document	13, 15

☐ Further documents are listed in the continuation of Box C. ☐

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Date of the actual completion of the international search	Date of mailing of the international search report
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