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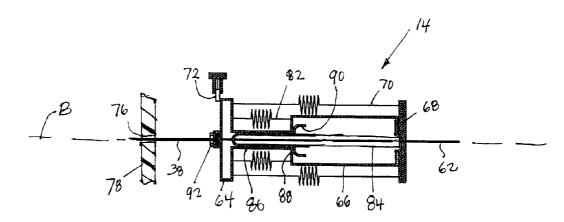
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(57) Abstract: A transcutaneous access tool includes a first cannula (38) moveable along an axis, a fixed member (68) including an elongated prong extending parallel with the axis, and a deployment member (64) secured to the first cannula and movable along the axis away from the fixed member. The deployment member includes spaced-apart, resiliently flexible fingers (90) extending parallel with the axis and having distal ends that are laterally enlarged with respect to the axis. The resiliently flexible fingers are received on the prong of the fixed member. A second cannula (62) is disposed within the lumen of the first cannula, and retraction member is secured to the second cannula and is movable along the axis. The retraction member includes at least one catch (88) catching on the laterally enlarged distal ends of the fingers of the deployment element when the fingers are laterally held apart by the prong of the fixed member.

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Documentation searched other than minimum documentation to the	extent that such documents are included in the fields searched .
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C. DOCUMENTS CONSIDERED TO BE RELEVANT	
Category * Citation of document, with indication, where a	ppropriate, of the relevant passages Relevant to claim No.
A US 2002/0072733 A1 (FLAHERTY) 13 June 2002 ((13.06.2003) 1-60
A US 2002/0123740 A1 (FLAHERTY et al.) 05 Septe	mber 2002 (0509.2003) 1-60
A EP 0 763 369 A1 (DAUGHERTY, CHARLES) 19 1	March 1997 (19.03.1997) 1-60
A US 5,871,470 A (McWHA) 16 February 1999 (16.0	(2.1999)
A US 5,865,806 A (HOWELL) 02 February 1999 (02.	02.1999) 1-60
Further documents are listed in the continuation of Box C.	See patent family annex.
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