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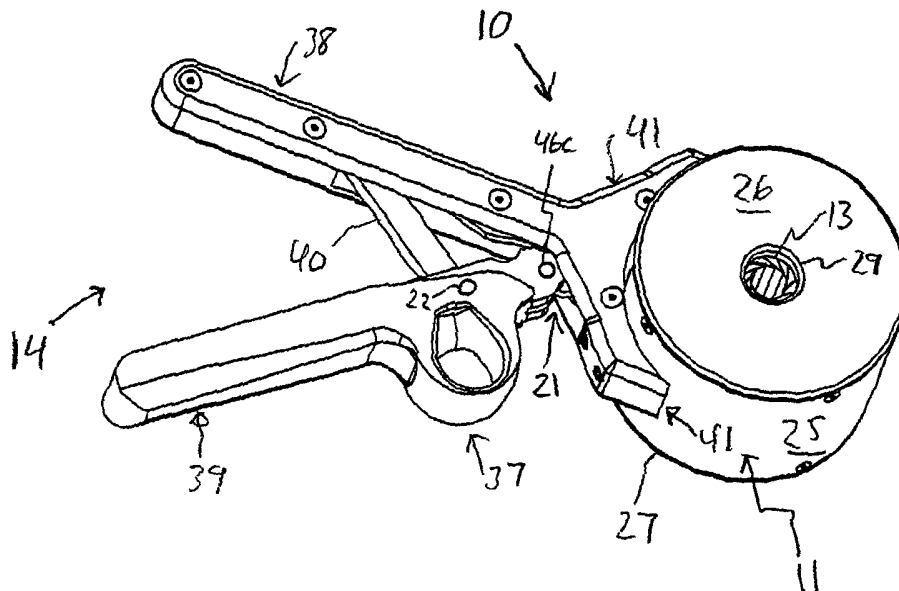
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[Continued on next page]

(54) Title: HAND HELD STENT CRIMPING APPARATUS AND METHOD



(57) Abstract: A hand actuatable apparatus (10) and method for crimping a stent or processing other articles by segmental radial compression. The apparatus includes a stationary base housing (11); a rotatable drive hub (12) which is moveable in relation to the base housing; a crimping head (13) communicatively coupled to the base housing and to the drive hub; and an actuator handle (14) connected to the base housing and to the drive hub. The crimping head includes a plurality of segments (15) oriented about a center aperture which receives a stent or article to be compressed. The segments (15) each have a proximal end and an angled distal end with at least one angled side face terminating in an edge of a predetermined length and defining the center aperture. Actuation of the handle rotates the drive hub, which causes the segments to move and pivot, resulting in closure of the center aperture and compression of the stent or other article.



— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

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INTERNATIONAL SEARCH REPORT

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US CL : 72/402, 409.19; 29/283.5

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)
U.S. : 72/402, 409.19; 29/237, 282, 283.5

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)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,261,263 A (WHITESELL) 16 November 1993, see Figure 11.	1, 2, 4-6 & 8-12
Y		3, 7, 13-20
Y	US 3,181,339 A (ESSER) 04 May 1965, see Figures 1 and 2.	3, 7
Y, E	US 6,629,350 B2 (MOTSENBOCKER) 07 October 2003, see Figures 5 and 9.	13-17 & 20
A	US 3,199,334 A (HOLMES et al) 10 August 1965, see Figure 1.	1-20
A	US 3,203,078 A (USTIN) 31 August 1965, see Figures 1 and 2.	1-20
A	US 4,041,766 A (JOHNSON et al) 16 August 1977, see Figure 1.	1-20
A	US 5,715,723 A (OWENS) 10 February 1998, see Figure 1.	1-20
A	US 6,176,116 B1 (WILHELM et al) 23 January 2001, see Figure 1.	1-20

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

☐ See patent family annex.

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"A" document defining the general state of the art which is not considered to be of particular relevance	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E" earlier application or patent published on or after the international filing date	"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
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C. (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP 50-103216 A (NIPPON KOUKUU DENSHI KOGYO K. K.) 07 August 1980, see Figure 8.	1-20