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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US 12/32826

A. CLASSIFICATION OF SUBJECT MATTER IPC(8) - E01D 11/00 (2012.01) USPC - 14/22 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) USPC: 14/22; IPC: E01D 11/00, 19/16 (2012.01)		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched USPC: 14/22, 18, 21, 77.1; 242/147R; 57/200, 210, 223 222 IPC E01D 11/00, 19/16 (2012.01)		
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) PubWest (USPT,PGPB,EPAB,JPAB); Dialog Classic; Google Patents; Key terms: parallel, align, individual, each, every, wire, strand, cable, rope, filament, fiber, elongate, rod, element, tension, pretension, prestress, stretch, cold work, nominal, suspension, equal length.		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 3,526,570 A (Durkee et al.) 01 Sep. 1970 (01.09.1970). Fig. 3 and 6, col. 1, lines 30-70, col. 3, lines 60-65, col. 4, lines 65-66, col. 8, lines 10-14.	1-14
X	US 4,594,827 A (Finsterwalder) 17 Jun. 1986 (17.06.1986). Fig. 1 and col. 3, lines 30-35 and 53-56, col. 4, lines 6-9 and 38-48.	15-20
X	US 5,056,284 A (Ruckdeschel et al.) 15 Oct. 1991 (15.10.1991), entire document	1-14
A	US 3,531,811 A (Baker et al.) 06 Oct. 1970 (06.10.1970). Col. 1, 25-60.	1-20
A	US 2,945,457 A (Avery et al.) 19 Jul. 1960 (19.07.1960). Col. 1, lines 45-59, col. 2, lines 44-60, col. 3, lines 40-60, col. 1, lines 45-59.	1-20
A	US 3,659,633 A (Durkee et al.) 2 May 1972 (02.05.1972). Col. 1, lines 42-60, col. 5, lines 15-37.	1-20
A	US 7,010,824 B2 (Stubler et al.) 14 Mar. 2006 (14.03.2006). Fig. 4, col. 1, lines 18-50.	1-20
A	US 3,919,762 A (Borelly) 18 Nov. 1975 (18.11.1975). Background, col. 5, lines 63-67, col. 5, line 65 to col. 6, line 36.	1-20
☐ Further documents are listed in the continuation of Box C. ☐		
* Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier application or patent but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "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 "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 "&" document member of the same patent family		
Date of the actual completion of the international search 07 Jul. 2012 (07.07.2012)		Date of mailing of the international search report 03 AUG 2012
Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US, Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201		Authorized officer: Lee W. Young PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774