



SUPPLEMENTARY EUROPEAN SEARCH REPORT

Application number:
EP 19 90 03 81

Classification of the application (IPC):

F16L 55/07, E03F 7/08, B23K 9/028, B23K 9/16, B23K 9/29, B23K 9/32, B23K 26/14, B23K 26/282, B23K 31/02, B23K 35/38, B23K 37/02, B23K 101/06

Technical fields searched (IPC):

B23K

DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim
X A	US 2005205647 A1 (WANG PEI-CHUNG [US] ET AL) 22 September 2005 (2005-09-22) * paragraphs [0020], [0025], [0035]; figures 2,3 *	1, 2, 9, 13-15 3-8, 10-12
X	US 2014263192 A1 (MILLER VICTOR [US]) 18 September 2014 (2014-09-18) * paragraphs [0016], [0031]; figures 1,2,7,9A *	1, 9, 14, 15
X	US 5484973 A (GITTENS TIMOTHY E [US] ET AL) 16 January 1996 (1996-01-16) * column 4, line 58 - column 5, line 25; figures 2,3 *	1, 2, 9, 13, 15
X	US 2009166338 A1 (SATO SEIICHI [JP]) 02 July 2009 (2009-07-02) * paragraphs [0036], [0039], [0056], [0057]; figure 2 *	1, 9, 14, 15
X	US 4415114 A (HALLENBECK EMERSON J [US]) 15 November 1983 (1983-11-15) * column 1, lines 4-11; figures 3,4 * * column 4, line 59 - column 5, line 46 * * column 3, lines 4-8 *	1-7, 9, 13-15

The supplementary search report has been based on the last set of claims valid and available at the start of the search.

Place of search The Hague	Date of completion of the search 12 August 2022	Examiner Kramer, Ellen
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CATEGORY OF CITED DOCUMENTS

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ANNEX TO SUPPLEMENTARY EUROPEAN SEARCH REPORT

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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on 12-08-2022
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