

INTERNATIONAL SEARCH REPORT

International application No.

PCT/EP2018/072847

A. CLASSIFICATION OF SUBJECT MATTER <i>G05B 19/4065</i> (2006.01)i		
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) G05B; B23Q		
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) EPO-Internal		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 1679566 A1 (FANUC LTD [JP]) 12 July 2006 (2006-07-12) abstract paragraph [0001] - paragraph [0002] paragraph [0008] - paragraph [0017] paragraph [0031] - paragraph [0069] figures	1-9
X	EP 1407853 A1 (FANUC LTD [JP]) 14 April 2004 (2004-04-14) abstract paragraph [0014] - paragraph [0017] paragraph [0019] - paragraph [0055] figures 5-8	1-9
X	WO 2007090536 A1 (COMARA KG [DE]; BLUEMEL ANDREAS [DE]; FRANKE REINER [DE]) 16 August 2007 (2007-08-16) abstract page 3, line 20 - page 7, line 27 claims figures	1-9
<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> See patent family annex.		
* 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 30 October 2018		Date of mailing of the international search report 07 November 2018
Name and mailing address of the ISA/EP European Patent Office p.b. 5818, Patentlaan 2, 2280 HV Rijswijk Netherlands Telephone No. (+31-70)340-2040 Facsimile No. (+31-70)340-3016		Authorized officer Abbing, Ralf Telephone No.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/EP2018/072847

C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	DE 4117637 A1 (NTN TOYO BEARING CO LTD [JP]) 05 December 1991 (1991-12-05) abstract column 2, line 7 - column 3, line 40	1-9

INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.

PCT/EP2018/072847

Patent document cited in search report			Publication date (day/month/year)	Patent family member(s)			Publication date (day/month/year)
EP	1679566	A1	12 July 2006	CN	1796973	A	05 July 2006
				EP	1679566	A1	12 July 2006
				US	2006142893	A1	29 June 2006

EP	1407853	A1	14 April 2004	DE	60310661	T2	03 May 2007
				EP	1407853	A1	14 April 2004
				JP	3883485	B2	21 February 2007
				JP	2004130407	A	30 April 2004
				US	2004068394	A1	08 April 2004

WO	2007090536	A1	16 August 2007	DE	102006004944	A1	16 August 2007
				WO	2007090536	A1	16 August 2007

DE	4117637	A1	05 December 1991	DE	4117637	A1	05 December 1991
				FR	2662628	A1	06 December 1991
				GB	2244610	A	04 December 1991
				JP	H0475855	A	10 March 1992
				US	5247452	A	21 September 1993
