

INTERNATIONAL SEARCH REPORT

International application No.

PCT/AT2018/060316

A. CLASSIFICATION OF SUBJECT MATTER

B23K 26/354(2014.01)i; **B23K 31/02**(2006.01)i; **C21D 9/50**(2006.01)i; **C23C 4/00**(2016.01)i; **H01T 13/39**(2006.01)i;
H01T 13/46(2006.01)i; **B23K 101/00**(2006.01)n; **B23K 101/36**(2006.01)n

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)

B23K; H05C; C21D; C23C; H01T

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, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DE 10025048 A1 (BERU AG) 06 December 2001 (2001-12-06)	13-15
Y	paragraphs [0011], [0019]; figures	1-12
Y	CN 108977805 A (NEW MATERIAL RES INSTITUTE OF SHANDONG ACADEMY OF SCIENCES ET AL.) 11 December 2018 (2018-12-11) abstract; figures	1-12
A	EP 3068001 A1 (ER SYSTEM MECHATRONIK GMBH) 14 September 2016 (2016-09-14) cited in the application abstract; claims; figures	1,13

Further documents are listed in the continuation of Box C.

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

27 September 2019

Date of mailing of the international search report

09 October 2019

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INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.

PCT/AT2018/060316

Patent document cited in search report	Publication date (day/month/year)	Patent family member(s)	Publication date (day/month/year)
DE 10025048 A1	06 December 2001	AT 264556 T	15 April 2004
		DE 10025048 A1	06 December 2001
		EP 1158632 A1	28 November 2001
		ES 2214353 T3	16 September 2004
		JP 4748493 B2	17 August 2011
		JP 2002008820 A	11 January 2002
		US 2002014005 A1	07 February 2002
		US 2003205957 A1	06 November 2003
CN 108977805 A	11 December 2018	NONE	
EP 3068001 A1	14 September 2016	AT 516835 A4	15 September 2016
		EP 3068001 A1	14 September 2016