



## SUPPLEMENTARY EUROPEAN SEARCH REPORT

Application number:  
EP 19 90 23 31

Classification of the application (IPC):  
**B23K 26/00**

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	US 2017270434 A1 (TAKIGAWA HIROSHI [JP] ET AL) 21 September 2017 (2017-09-21) * paragraphs [0053], [0057], [0061], [0062] - [0067], [0070], [0073]; claims *	1-8

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 22 August 2022	Examiner Caubet, J
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### CATEGORY OF CITED DOCUMENTS

- |   |  |
|---|--|
| X: particularly relevant if taken alone   | P: intermediate document   |
| Y: particularly relevant if combined with another document of the same category | T: theory or principle underlying the invention                        |
| A: technological background   | E: earlier patent document, but published on, or after the filing date |
| O: non-written disclosure   | D: document cited in the application                                   |
| & : member of the same patent family, corresponding document                    | L: document cited for other reasons                                    |

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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 22-08-2022.  
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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2017270434	A1	21-09-2017	CN 107199397 A 26-09-2017
			DE 102017105224 A1 21-09-2017
			JP 6625914 B2 25-12-2019
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