



SUPPLEMENTARY EUROPEAN SEARCH REPORT

Application number:
EP 19 82 65 79

Classification of the application (IPC):

B01D 53/26, H01S 5/068, H01S 3/00, H01S 3/02, H01S 5/0222, H01S 5/024, H01S 5/40

Technical fields searched (IPC):

H01S, B01D

DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim
X	JP 2006013232 A (KOMATSU MFG CO LTD; USHIO ELECTRIC INC) 12 January 2006 (2006-01-12)	1, 2, 5, 9, 10, 12, 13
Y	* paragraphs [0038], [0076] - [0078]; figure 2 *	3, 4, 6-8, 11, 14-16
Y	US 2017163005 A1 (TAKIGAWA HIROSHI [JP] ET AL) 08 June 2017 (2017-06-08) * figure 15b *	3, 4, 6-8, 11, 14-16
A	JP 2016081993 A (AMADA HOLDINGS CO LTD) 16 May 2016 (2016-05-16) * paragraph [0038]; figure 5 *	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 Munich	Date of completion of the search 16 July 2021	Examiner Cortona, Anna
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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 16-07-2021
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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
JP 2006013232	A	12-01-2006	NONE
US 2017163005	A1	08-06-2017	CN 106848811 A 13-06-2017 DE 102016123330 A1 08-06-2017 JP 6285404 B2 28-02-2018 JP 2017103414 A 08-06-2017 US 2017163005 A1 08-06-2017
JP 2016081993	A	16-05-2016	JP 6435153 B2 05-12-2018 JP 2016081993 A 16-05-2016