



SUPPLEMENTARY EUROPEAN SEARCH REPORT

Application number:
EP 22 85 01 69

Classification of the application (IPC):

F04B 15/02, F04B 17/03, F04B 53/14, F04B 9/02, F04B 17/06, F04B 23/06,
F04B 49/20, F04B 49/06

Technical fields searched (IPC):

F04B

DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim
X	US 2020166026 A1 (MARICA ADRIAN [US]) 28 May 2020 (2020-05-28) * figures 1-20 * * paragraph [0070] - paragraph [0119] *	1-20
X A	US 2015354329 A1 (PERRY LARRY [US] ET AL) 10 December 2015 (2015-12-10) * figures 1-6 * * paragraph [0016] - paragraph [0029] *	1-10, 18-20 11-17
A	JP H0422767 A (AIOI SEIKI KK) 27 January 1992 (1992-01-27) * figures 1-2 * * page 2 - page 4 *	1-20
A	US 5725358 A (BERT JEFFREY D [US] ET AL) 10 March 1998 (1998-03-10) * figures 1-6 * * column 3, line 56 - column 8, line 4 *	1-20
A	US 2019224700 A1 (FEHR DAVID L [US] ET AL) 25 July 2019 (2019-07-25) * figures 1-2 * * paragraph [0014] - paragraph [0028] *	1-20

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 30 August 2024	Examiner Ricci, Saverio
---------------------------	--	----------------------------

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 |

Disclaimer: this document has been automatically generated using data structured in accordance with WIPO standard ST.36 from the database of search reports of the European Patent Office. For technical reasons, its content and layout may differ from that of the original publication. Only the original published information is legally binding.



ANNEX TO SUPPLEMENTARY EUROPEAN SEARCH REPORT

Application number:
EP 22 85 01 69

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 30-08-2024
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2020166026 A1	28-05-2020	BR 112018013982 A2 CA 3010732 A1 CN 108603496 A EA 201891517 A1 EP 3402987 A2 US 2020166026 A1 WO 2017123656 A2	11-12-2018 20-07-2017 28-09-2018 31-01-2019 21-11-2018 28-05-2020 20-07-2017
US 2015354329 A1	10-12-2015	US 2015354329 A1 WO 2015191692 A1	10-12-2015 17-12-2015
JP H0422767 A	27-01-1992	NONE	
US 5725358 A	10-03-1998	US 5725358 A US 6074170 A	10-03-1998 13-06-2000
US 2019224700 A1	25-07-2019	CN 105377444 A DK 3021978 T3 EP 3021978 A1 ES 2751736 T3 JP 6595466 B2 JP 2016525442 A KR 20160033167 A PL 3021978 T3 TW 201517993 A US 2016153441 A1 US 2019224700 A1 WO 2015010038 A1	02-03-2016 11-11-2019 25-05-2016 01-04-2020 23-10-2019 25-08-2016 25-03-2016 28-02-2020 16-05-2015 02-06-2016 25-07-2019 22-01-2015