



SUPPLEMENTARY EUROPEAN SEARCH REPORT

Application number:
EP 18 85 06 19

Classification of the application (IPC):

D03D 1/00, D03D 3/04, D03D 15/283, D03D 9/00, D03D 15/267, D03D 15/47, D03D 15/513, D03D 19/00

Technical fields searched (IPC):

D03D

DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim
X	US 2009197493 A1 (CHAHAL VINOD KUMAR [US]) 06 August 2009 (2009-08-06)	1-3, 5-10, 12-14
Y	* paragraph [0004] *	10, 13, 14
A	* paragraph [0014] - paragraph [0020] *	4, 11
X	JP 2004292984 A (TORAY MONOFILAMENT CO) 21 October 2004 (2004-10-21)	1-3, 5-9, 12 4, 10, 13, 14
Y	* paragraph [0003] *	11
A	* examples 1-3 *	
X	US 4359501 A (DITULLIO VENANZIO) 16 November 1982 (1982-11-16)	1, 2, 5-9, 11, 12
Y	* column 2, line 18 - line 68 *	10, 13, 14
Y	* column 3, line 40 - column 4, line 55 *	3, 4
A	* column 7, line 55 - column 8, line 7 *	
Y	US 2013277374 A1 (LEWIS WILLIAM JAMES [US] ET AL) 24 October 2013 (2013-10-24)	4
	* paragraph [0024] *	

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 26 March 2021	Examiner Hausding, Jan
---------------------------	---	---------------------------

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 18 85 06 19

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 26-03-2021
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 2009197493	A1	06-08-2009	AT 528430 T	15-10-2011
			CA 2714035 A1	13-08-2009
			CN 102016153 A	13-04-2011
			DK 2252733 T3	02-01-2012
			EP 2252733 A1	24-11-2010
			ES 2373422 T3	03-02-2012
			HK 1151840 A1	10-02-2012
			JP 5539231 B2	02-07-2014
			JP 2011511179 A	07-04-2011
			US 2009197493 A1	06-08-2009
			WO 2009098185 A1	13-08-2009
			JP 2004292984	A
JP 2004292984 A	21-10-2004			
US 4359501	A	16-11-1982	AT 42582 T	15-05-1989
			AU 551091 B2	17-04-1986
			BR 8205746 A	06-09-1983
			CA 1184799 A	02-04-1985
			DE 77901 T1	27-10-1983
			EP 0077901 A2	04-05-1983
			FI 72163 B	31-12-1986
			MX 159272 A	11-05-1989
			US 4359501 A	16-11-1982
			US 2013277374	A1
EP 2839216 A1	25-02-2015			
MX 344412 B	15-12-2016			
PL 2839216 T3	30-11-2018			
US 2013277374 A1	24-10-2013			
WO 2013158838 A1	24-10-2013			