

INTERNATIONAL SEARCH REPORT

International application No. PCT/JP2020/010588
--

A. CLASSIFICATION OF SUBJECT MATTER
 Int. Cl. G02B5/30 (2006.01) i, B32B7/023 (2019.01) i, B32B17/10 (2006.01) i,
 G02F1/1335 (2006.01) i
 FI: G02B5/30, B32B7/023, B32B17/10, G02F1/1335 510
 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)
 Int. Cl. G02B5/30, B32B7/023, B32B17/10, G02F1/1335

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
 Published examined utility model applications of Japan 1922-1996
 Published unexamined utility model applications of Japan 1971-2020
 Registered utility model specifications of Japan 1996-2020
 Published registered utility model applications of Japan 1994-2020

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	JP 2016-148848 A (NITTO DENKO CORP.) 18 August 2016, claims, paragraphs [0018]-[0026], [0087], [0088], fig. 1	1-16
Y	WO 2013/175767 A1 (KONICA MINOLTA, INC.) 28 November 2013, claims	1-16
A	WO 2017/216886 A1 (NITTO DENKO CORP.) 21 December 2017, entire text, all drawings	1-16

Further documents are listed in the continuation of Box C. See patent family annex.

* Special categories of cited documents:	“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
“A” document defining the general state of the art which is not considered to be of particular relevance	“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
“E” earlier application or patent but published on or after the international filing date	“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
“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)	“&” document member of the same patent family
“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	

Date of the actual completion of the international search 13.05.2020	Date of mailing of the international search report 26.05.2020
---	--

Name and mailing address of the ISA/ Japan Patent Office 3-4-3, Kasumigaseki, Chiyoda-ku, Tokyo 100-8915, Japan	Authorized officer Telephone No.
--	---

INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.
PCT/JP2020/010588

Patent Documents referred to in the Report	Publication Date	Patent Family	Publication Date
JP 2016-148848 A	18.08.2016	JP 2012-237965 A	
		JP 2018-156086 A	
WO 2013/175767 A1	28.11.2013	US 2015/0146294 A1	
		claims	
		CN 104335085 A	
		KR 10-2015-0004835 A	
		TW 201409094 A	
WO 2017/216886 A1	21.12.2017	SG 112018104457 A	
		CN 109313299 A	
		KR 10-2019-0019922 A	