

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/EP2019/081441

**A. CLASSIFICATION OF SUBJECT MATTER**

**G02B 6/38**(2006.01)i; **B23K 26/26**(2014.01)i; **B23K 26/08**(2014.01)i; **B23K 26/046**(2014.01)i; **G02B 6/24**(2006.01)i;  
**G02B 6/42**(2006.01)i

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)

G02B; B23K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

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

EPO-Internal, WPI Data

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X A	JP 2017068052 A (NIPPON ELECTRIC GLASS CO) 06 April 2017 (2017-04-06) abstract; figures 1-4	12-14 1-11
A	EP 0905534 A2 (WHITAKER CORP [US]) 31 March 1999 (1999-03-31) cited in the application paragraph [0012]; claims 1,2,3,8; figures 1-2	1-14
A	EP 2056144 A1 (HIGHYAG LASERTECHNOLOGIE GMBH [DE]) 06 May 2009 (2009-05-06) paragraph [0025] paragraph [0043]; figure 4	1-14

Further documents are listed in the continuation of Box C.

See patent family annex.

\* Special categories of cited documents:

“A” document defining the general state of the art which is not considered to be of particular relevance  
 “E” earlier application or patent but published on or after the international filing date  
 “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)  
 “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

“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  
 “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  
 “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  
 “&” document member of the same patent family

Date of the actual completion of the international search

**24 February 2020**

Date of mailing of the international search report

**04 March 2020**

Name and mailing address of the ISA/EP

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INTERNATIONAL SEARCH REPORT  
Information on patent family members

International application No.

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Patent document cited in search report	Publication date (day/month/year)	Patent family member(s)	Publication date (day/month/year)
JP 2017068052 A	06 April 2017	NONE	
EP 0905534 A2	31 March 1999	NONE	
EP 2056144 A1	06 May 2009	NONE	