

INTERNATIONAL SEARCH REPORT

International application No.

PCT/KR2015/004498

A. CLASSIFICATION OF SUBJECT MATTER

G03F 7/20(2006.01)i, G02B 5/20(2006.01)i, G02F 1/13(2006.01)i, G06F 3/041(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)

G03F 7/20; H01L 21/027; G02B 21/06; G02B 5/20; G02F 1/13; G06F 3/041

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

Korean Utility models and applications for Utility models: IPC as above

Japanese Utility models and applications for Utility models: IPC as above

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

eKOMPASS (KIPO internal) & Keywords: photomask, specimen, proximity exposure system, light source, reflective container, light control, final mirror, diffraction, LCD, OLED, transcription

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	KR 10-1997-0004421 B1 (HYUNDAI ELECTRONICS INDUSTRIES CO., LTD.) 27 March 1997 See claim 1; page 1.	1-9
A	JP 2000-232056 A (MINOLTA CO., LTD.) 22 August 2000 See abstract; claims 1-7.	1-9
A	JP 2003-037056 A (CARL-ZEISS-STIFTUNG TRADING AS CARL ZEISS) 07 February 2003 See abstract; claims 1-33.	1-9
A	JP 2003-224047 A (CANON INC.) 08 August 2003 See abstract; claims 1-8.	1-9
A	KR 10-0566096 B1 (ELECTRONICS AND TELECOMMUNICATIONS RESEARCH INSTITUTE) 31 March 2006 See abstract; claims 1, 8.	1-9



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

20 JULY 2015 (20.07.2015)

Date of mailing of the international search report

20 JULY 2015 (20.07.2015)

Name and mailing address of the ISA/KR


 Korean Intellectual Property Office
 Government Complex-Daejeon, 189 Seonsa-ro, Daejeon 302-701,
 Republic of Korea

Facsimile No. 82-42-472-7140

Authorized officer

Telephone No.

INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.

PCT/KR2015/004498

Patent document cited in search report	Publication date	Patent family member	Publication date
KR 10-1997-0004421 B1	27/03/1997	KR 10-1995-0021037 A	26/07/1995
JP 2000-232056 A	22/08/2000	NONE	
JP 2003-037056 A	07/02/2003	DE 10113788 A1	26/09/2002
		EP 1243947 A2	25/09/2002
		EP 1243947 A3	14/04/2004
		EP 1243947 B1	06/05/2009
		JP 04308475 B2	05/08/2009
		KR 10-2002-0075279 A	04/10/2002
		US 2003-0007712 A1	09/01/2003
		US 6885491 B2	26/04/2005
JP 2003-224047 A	08/08/2003	NONE	
KR 10-0566096 B1	31/03/2006	US 2006-0109444 A1	25/05/2006
		US 7190432 B2	13/03/2007