



## SUPPLEMENTARY EUROPEAN SEARCH REPORT

Application number:  
EP 20 90 69 93

**Classification of the application (IPC):**  
H01L 27/146, G02B 5/22, G02B 5/20, G02B 1/04

**Technical fields searched (IPC):**  
H01L

DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim
X	JP 2019180048 A (SONY SEMICONDUCTOR SOLUTIONS CORP) 17 October 2019 (2019-10-17) * paragraph [0099] - paragraph [0107]; figures 19A-22, 27,26,28,29,30 *	1-8
X	US 2018076258 A1 (HSIEH YU-JUI [TW] ET AL) 15 March 2018 (2018-03-15) * paragraphs [0023], [0037] - [0042], [0055]; figures 3,5 *	9, 10
A	WO 2019176975 A1 (FUJIFILM CORP [JP]) 19 September 2019 (2019-09-19) * paragraphs [0124] - [0141], [0211], [0286]; figures 1-4 *	2-8
A	US 2016320529 A1 (KASHIWAGI DAISUKE [JP] ET AL) 03 November 2016 (2016-11-03) * the whole document *	2-8

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 The Hague	Date of completion of the search 23 January 2023	Examiner Hedouin, Mathias
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### 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

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## ANNEX TO SUPPLEMENTARY EUROPEAN SEARCH REPORT

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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 23-01-2023.  
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