

Title (en)  
MICROSTRUCTURE ENHANCED ABSORPTION PHOTOSENSITIVE DEVICES

Title (de)  
MIKROSTRUKTURVERBESSERTE LICHTEMPFLINDLICHE ADSORPTIONSVORRICHTUNGEN

Title (fr)  
DISPOSITIFS PHOTOSENSIBLES À ABSORPTION AMÉLIORÉE PAR DES MICROSTRUCTURES

Publication  
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Application  
**EP 20868204 A 20200921**

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- US 201962914028 P 20191011
- US 201962925183 P 20191023
- US 201962950888 P 20191219
- US 202062957779 P 20200106
- US 202062964094 P 20200121
- US 202062968093 P 20200130
- US 202062969624 P 20200203
- US 202062975726 P 20200212
- US 202062978736 P 20200219
- US 202062981979 P 20200226
- US 202062985171 P 20200304
- US 202062993414 P 20200323
- US 202062994758 P 20200325
- US 202063005152 P 20200403
- US 202063009928 P 20200414
- US 202063011217 P 20200416
- US 202063016160 P 20200427
- US 202063019208 P 20200501
- US 202063026591 P 20200518
- US 202063033153 P 20200601
- US 202063034964 P 20200604
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- US 202063038079 P 20200611
- US 201962937813 P 20191120
- US 201962943146 P 20191203
- US 202063039945 P 20200616
- US 202063039941 P 20200616
- US 202063041997 P 20200621
- US 202063043709 P 20200624
- US 202063048641 P 20200706
- US 202063050044 P 20200709
- US 202063051896 P 20200715
- US 202063054192 P 20200720
- US 2020051733 W 20200921

Abstract (en)  
[origin: WO2021061543A1] Microstructure enhanced photodetector arrangements uses a CMOS image sensor (CIS) wafer of crystalline Si and a CMOS Logic Processor (CLP) wafer stacked on each other for electrical interaction. The wafers can be fabricated separately and stacked or can be regions of the same monolithic chip. The image can be a time-of-flight image. Bayer arrays are enhanced with microstructure holes. Avalanche photodiodes, single photon avalanche photodiodes and phototransistors can be laterally and/or vertically doped. Photodetectors / photosensors can have slanted sidewalls for improved optical confinement and reduced crosstalk.

IPC 8 full level  
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Citation (search report)

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- [X] CN 109659377 A 20190419 - SHENZHEN ADAPS PHOTONICS TECH CO LTD
- [E] EP 3772104 A1 20210203 - W&WSENS DEVICES INC [US]
- [A] WO 2017112747 A1 20170629 - W&WSENS DEVICES INC [US]
- See references of WO 2021061543A1

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