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Dierickx

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(54) **CHARGE DOMAIN BINNING IN A MOS PIXEL**

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CPC **H04N 5/347** (2013.01); **H04N 5/343** (2013.01); **H04N 5/374** (2013.01); **H01L 27/1464** (2013.01)

(58) **Field of Classification Search**

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See application file for complete search history.

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(57) **ABSTRACT**

An array of pixels for charge domain binning in a CMOS image sensor, to increase the readout sensitivity of such a sensor. The array of pixels comprises at least two pixels in a common substrate. At least one of said pixels is configured or configurable to function as a pixel of a first type with a first, higher, charge collecting capability, for collecting charges generated by radiation impinging on the substrate. At least another one of said pixels is configurable to function as pixel of a second type, with a second, reduced, charge collecting capability, and as a pixel of the first type.

15 Claims, 8 Drawing Sheets

