

Title (en)
MULTI-PHOTODETECTOR UNIT CELL

Title (de)
MEHRFACHDETEKTORZELLEINHEIT

Title (fr)
CELLULE A PLUSIEURS PHOTODETECTEURS

Publication
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Application
EP 00948237 A 20000730

Priority
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Abstract (en)
[origin: WO0110117A1] A multi-cell cluster (12) which includes a plurality of light-detecting unit cells (14) and a single charge-integration and readout circuitry (27). Typically, each of the cells produces charge representative of the detected light. The circuit may be shared by the plurality of unit cells, and used to read-out the charge in real-time. The cluster (12) may also include a switch associated with each unit cell, such that each switch connects its associated unit cell to the circuit. The switch may also be controlled in a time-multiplexing manner. Each unit cell may include a photodetector (22), a photodiode, or a photogate. The circuit may include a shared storage device, a shared reset circuit, or a readout circuit (27). Typically, the shared storage device may be for accumulating the charge in the focal plane. The here-above described apparatus facilitates either static or dynamic, either local or global image resolution/sensitivity tradeoffs.

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