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**(54) PIXEL CIRCUIT FOR DETECTING TIME-DEPENDENT VISUAL DATA**

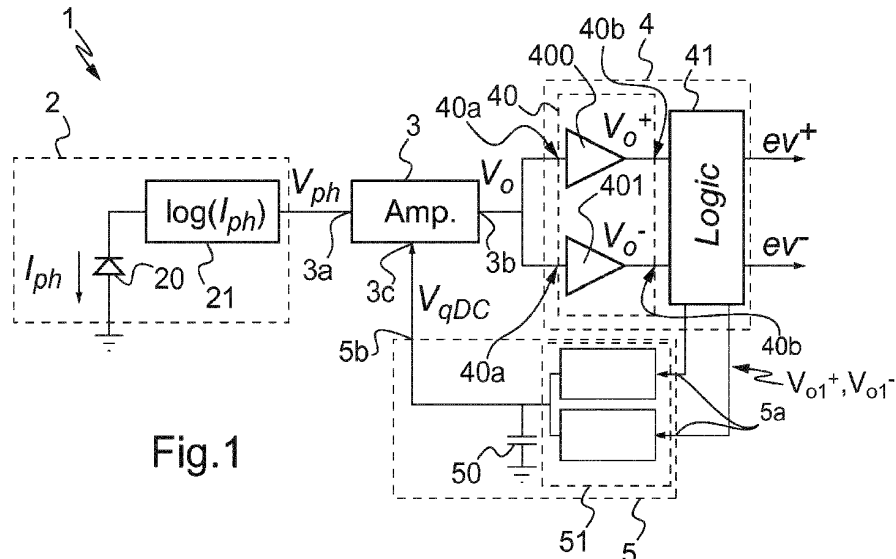
(57) A pixel circuit for detecting time-dependent visual data comprises a photo sensing device detecting a light intensity and generating a signal representing the detected light intensity.

The pixel circuit further comprises:

- a voltage amplifier (3) configured for amplifying the signal representing the detected light intensity ( $V_{ph}$ ) and generating an amplified signal ( $V_o$ ), the amplified signal being generated by taking into account a control signal ( $V_{qDC}$ ) which shifts an input voltage offset of said voltage

amplifier,

- a hysteresis comparing module (4) configured for comparing the amplified signal to at least one threshold value ( $\theta_{o+}$ ,  $\theta_{o-}$ ) and to a reference value ( $V_{ref}$ ) and for generating at least one output signal ( $V_{o+}$ ,  $V_{o-}$ ;  $V_{o1+}$ ,  $V_{o1-}$ ) based on said comparison, and
- a feedback control module configured for generating said control signal of said voltage amplifier based on said at least one output signal generated by said hysteresis comparing module.



**Fig.1**

**EP 3 313 064 A1**