

Title (en)
BASE CALLING USING CONVOLUTIONS

Title (de)
BASE-CALLING UNTER VERWENDUNG VON FALTUNGEN

Title (fr)
APPEL DE BASE AU MOYEN DE CONVOLUTIONS

Publication
EP 3970151 A1 20220323 (EN)

Application
EP 20730877 A 20200515

Priority

- US 201962849091 P 20190516
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- US 201962849133 P 20190516
- US 202016874599 A 20200514
- US 202016874633 A 20200514
- US 2020033281 W 20200515

Abstract (en)
[origin: EP4394778A2] A method of determining tag signals from measured intensities is disclosed, the measured intensities collected by light sensors (206, 208, 210, 212, 214) in a sensor array directed to a sample surface (234), the sample surface (234) including pixel areas (206', 208', 210', 212', 214') and holding a plurality of clusters (206A, 206B, 208A, 208B, 210A, 210B, 212A, 212B, 214A, 214B) during a sequence of sampling events, each light sensor (206, 208, 210, 212, 214) directed to and measuring intensity from one of the pixel areas (206', 208', 210', 212', 214') during each sampling period includes adjustments for background intensity (675) and crosstalk (645) and taking into account signal decay (625) and phasing (623) / pre-phasing. Coefficients for the adjustments can be determined by gradient descent, using as ground truth base calling by the system or by using reliable base calling of well- sample run through the system.

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