

Title (en)

METHOD AND DEVICE FOR CONTROLLING A MATRIX ELECTRON SOURCE, WITH REGULATION BY THE EMITTED CHARGE

Title (de)

VERFAHREN UND VORRICHTUNG ZUR STEUERUNG EINER ELEKTRONENQUELLE IN MATRIXSTRUKTUR, MIT REGULIERUNG DURCH DIE EMITTIERTE LADUNG

Title (fr)

PROCEDE ET DISPOSITIF DE COMMANDE D'UNE SOURCE D'ELECTRONS A STRUCTURE MATRICIELLE, AVEC REGULATION PAR LA CHARGE EMISE

Publication

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Application

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Abstract (en)

[origin: WO0207139A1] The invention concerns a method and a device for controlling a matrix electron source, with regulation by the emitted charge. The invention is applicable to a source of electrons comprising addressing lines and columns, whereof the intersection defines emissive zones, the electrons being supplied by the columns. The invention is characterised in that the method consists in: triggering electron emission by bringing the potential of the columns to a value capable of enabling emission which is preferably that of non-addressed lines; then maintaining during the entire emission, the potential of the columns at said value, while simultaneously measuring, in the columns, the amount of charges emitted by the pixels of said columns. In a second phase, when the amount of charges measured on one column reaches an amount of charges required, switching the potential of said column to another value blocking the electron emission. The invention is particularly applicable to microtip flat screens.

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