

## Title (en)

Method for making flat display screens and flat screens made according to this method.

## Title (de)

Verfahren zur Herstellung flacher Bildwiedergabeschirme und nach diesem Verfahren hergestellte Schirme.

## Title (fr)

Procédé d'opération d'écrans de visualisation plats.

## Publication

**EP 0155895 A1 19850925 (FR)**

## Application

**EP 85430005 A 19850305**

## Priority

FR 8403877 A 19840309

## Abstract (en)

[origin: US4763187A] A device and method for formation of images with flat video screens by a line- and column-addressed point matrix. Field point matrix uses field emission micro tips as fluorescent screen portions being connected in columns. An electric field is applied between each tip and the fluorescent screen portion corresponding thereto, such that the respective tip emits electrons and a light spot is formed on the video screen, the intensity of which depends upon the applied voltage for attracting electrons. Emission from other tips is blocked by applying a negative voltage to the other columns. Thus, by successive switchings, successive luminous spots are formed on the video screen as desired.

## Abstract (fr)

Le procédé de l'invention consiste à utiliser comme source d'électrons des micropointes à émission de champ (1A1 - 1B1 - 1C1...); à connecter, d'une part, ces pointes en lignes, et d'autre part, des écrans fluorescents en colonnes (2A, 2B, 2C...); à appliquer un champ électrique, successivement, entre chacune des pointes et l'écran qui lui correspond de façon que la pointe en question émette des électrons et forme sur l'écran un point lumineux dont l'intensité dépend de la tension d'extraction des électrons appliquée; et à bloquer simultanément toutes les autres pointes, en appliquant une tension négative sur les autres colonnes non impliquées dans l'émission des électrons; et ainsi de suite par commutations successives pour obtenir la formation sur l'écran des points lumineux successifs correspondant à ceux de la matrice.

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**H01J 31/12; H01J 29/52**

## IPC 8 full level

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## Citation (applicant)

FR 2348561 A1 19771110 - BATTELLE MEMORIAL INSTITUTE [CH]

## Citation (search report)

- [Y] US 3622828 A 19711123 - ZINN MORTIMER H
- [A] DE 3035988 A1 19820429 - SIEMENS AG [DE]
- [A] FR 2503432 A1 19821008 - FUTABA DENSHI KOGYO KK [JP]
- [A] FR 2348561 A1 19771110 - BATTELLE MEMORIAL INSTITUTE [CH]
- [Y] PATENTS ABSTRACTS OF JAPAN, vol. 7, (E-162)(1197), 2 mars 1983, page 52 E 162; & JP - A - 57 202 051 (FUTABA DENSHI KOGYO K.K.) 10-12-1982
- [A] JEE JOURNAL OF ELECTRONIC ENGINEERING, vol. 17, no. 161, mai 1980, pages 57-60, Tokyo, JP; T. NAKAMURA: "Itron VFDs become word processing displays"

## Cited by

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