Title (en)

ELECTROPHORETIC DISPLAY PANEL HAVING ROTATABLE PARTICLES

Title (de)

ELEKTROPHORETISCHE ANZEIGETAFEL MIT DREHBAREN PARTIKELN

Title (fr)

AFFICHEUR ELECTROPHORETIQUE A PARTICULES ROTATIVES

Publication

EP 1738346 A1 20070103 (EN)

Application

EP 05718644 A 20050406

Priority

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Abstract (en)

[origin: WO2005101361A1] For a display panel (1) to have pixels (2) capable of having a relatively large number of attainable optical states for displaying a picture, a pixel (2) has an electrophoretic medium (5) having particles (6), each particle (6) has in operation an electrical multipole for being able to be moved and rotated and at least two surface portions having dissimilar optical properties e.g. colours. An optical state depends on a position and an orientation of the particles (6). Furthermore, a particle controller (10, 11, 20, 21, 100) is arranged to enable a movement and a rotation of the particles (6) to one of the positions and one of the orientations, respectively, for displaying the picture. One set of electrodes (10, 11) control whether particles are in a distribution state or a collected state within the pixel. A second set of electrodes (20, 21) select the degree of rotation of the particles.

IPC 8 full level

G09G 3/34 (2006.01); G02F 1/167 (2006.01)

CPC (source: EP KR)

G09G 3/3446 (2013.01 - EP KR); **G09G 3/3453** (2013.01 - EP KR); G09G 2300/0452 (2013.01 - EP KR); G09G 2310/061 (2013.01 - EP KR); G09G 2340/0457 (2013.01 - EP KR)

Citation (search report)

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