

Title (en)  
Display apparatus

Title (de)  
Anzeigevorrichtung

Title (fr)  
Dispositif d'affichage

Publication  
**EP 1293955 A2 20030319 (EN)**

Application  
**EP 01309923 A 20011126**

Priority  
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Abstract (en)  
A display apparatus comprises a support member and a plurality of light-emitting elements attached to the support member. The apparatus performs a predetermined display by light-emission controlling the light-emitting elements. The display apparatus further comprises one or a plurality of light-emitting element panels (5), each having a support frame (50F) and a plurality of light-emitting element bars (80) arranged in parallel at regular intervals (G) and connected to the support frame (50F), each light-emitting bar (80) being covered by a cylindrical translucent pipe (81); and further comprises light-emission control means (10 to 40, 51 to 53) including computers (11 to 13), which control the plurality of light-emitting element bars (80) in the one or the plurality of light-emitting element panels (50). <IMAGE> <IMAGE>

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**G09F 9/33; G09G 3/00**

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Cited by  
EP2081172A1; US7852285B2; BE1019934A3; EP1929458A4; DE102008002219B4; EP1594109A1; EP1635310A3; EP1968033A1; EP1892691A1; EP2099011A4; US8081145B2; WO2008025722A1; DE102007011986A1; DE102008002219A1; EP2843180A2; EP1635310A2; EP2042983A2; WO2004114268A1; WO2014121716A1; US8317352B2; US8727581B2; US9377178B2; US9449538B2; US10048424B2; WO2007134469A1; WO2010094712A3; WO2017123115A1; EP2030190A1

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