

Title (en)  
THERMAL CONTROL SYSTEM FOR AN ELECTRONIC DISPLAY

Title (de)  
THERMISCHES STEUERSYSTEM FÜR EINE ELEKTRONISCHE ANZEIGE

Title (fr)  
SYSTÈME DE CONTRÔLE THERMIQUE POUR UN PANNEAU D'AFFICHAGE ÉLECTRONIQUE

Publication  
**EP 2370987 A4 20140423 (EN)**

Application  
**EP 09837994 A 20091218**

Priority  
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• US 25229509 P 20091016  
• US 15287909 P 20090216

Abstract (en)  
[origin: WO2010080624A2] A cooling assembly for an electronic image assembly and a display assembly containing the same. Some embodiments use ambient gas to cool power modules and/or an image assembly (sometimes backlight). Other embodiments use a closed loop of circulating gas which passes across the front surface of an image assembly and through a heat exchanger. An open loop passes through the heat exchanger and extracts heat from the circulating gas. Ambient air may be used as the ambient gas. An optional additional channel may be used to cool the back portion of the image assembly or backlight with ambient gas. Some embodiments also use thermally conductive plates and ribs to distribute the heat and avoid hot spots in the display. The cooling assembly can be used with any type of electronic assembly for producing an image.

IPC 8 full level  
**H01J 17/28** (2006.01); **G02F 1/1333** (2006.01); **H01L 51/50** (2006.01); **H05K 7/20** (2006.01)

CPC (source: EP KR)  
**G02F 1/133385** (2013.01 - EP KR); **G02F 1/133628** (2021.01 - KR); **H05K 7/20163** (2013.01 - EP KR); **H05K 7/20963** (2013.01 - EP KR); **H05K 7/20972** (2013.01 - EP KR); **G02F 2201/36** (2013.01 - EP KR)

Citation (search report)  
• [X] EP 1951020 A1 20080730 - ISL MEDIA SINGAPORE PTE LTD [SG]  
• [I] US 5991153 A 19991123 - HEADY GREGORY S [US], et al  
• [A] GB 2402205 A 20041201 - DENSITRON TECHNOLOGIES PLC [GB]  
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